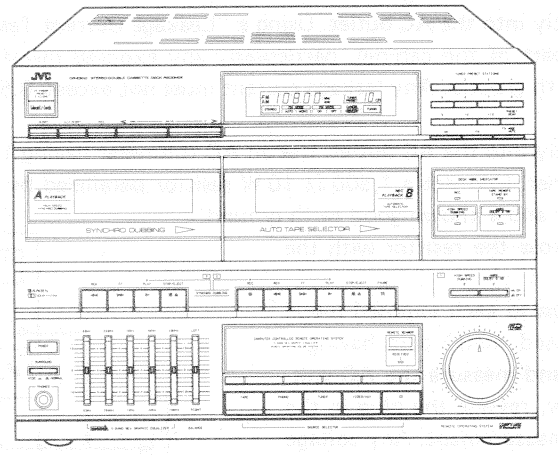
JVC

SERVICE MANUAL

STEREO DOUBLE CASSETTE DECK RECEIVER

MODEL No. DR-E300BK
DR-E300LBK



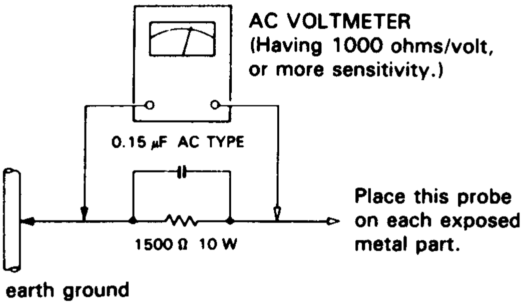
Contents

	Page
Safety Precautions	1- 2
Instruction Book	1- 3
Block Diagram	1-23
Removal Procedures	1-25
FM/MW/LW Tuner Alignment Procedures	1-27
Cassette Deck Adjustment Procedures	1-30
Troubleshooting the Cassette Amplifier P.C. Board	1-33
Internal Block Diagrams of Major ICs	1-36
Connection Diagram	1-41
Parts List	Separate Volume Insertion
Schematic Diagrams	Insertion

No. 20024
Feb. 1988

Safety Precautions

1. The design of this product contains special hardware and may circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 µF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

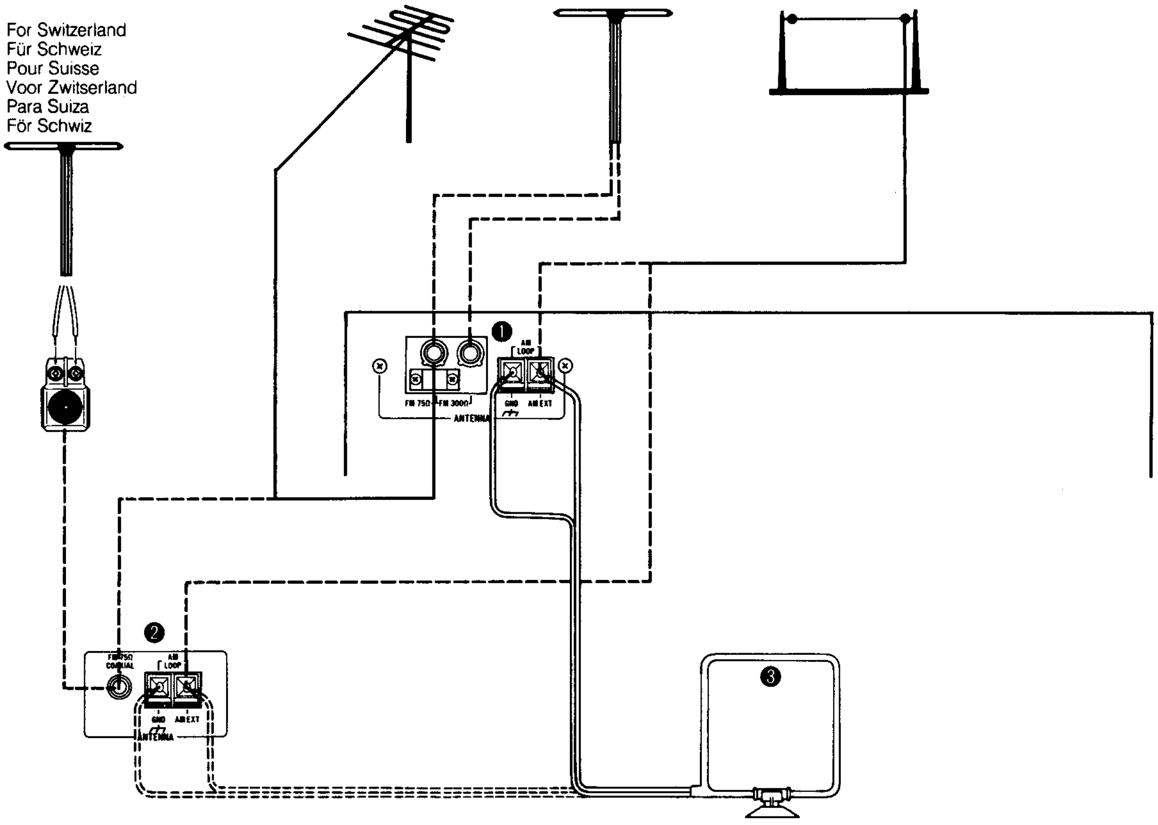
1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Instruction Book

CONNECTION DIAGRAM

ANSCHLUSSDIAGRAMM

DIAGRAMME DES RACCORDEMENTS



For Switzerland
Für Schweiz
Pour Suisse
Voor Zwitserland
Para Suiza
För Schwiz

Fig. 1
Abb. 1
Afb. 1

❶ External ANTENNA terminals
❷ External ANTENNA terminals (for W. Germany and Switzerland)
❸ AM loop antenna
❹ SPEAKERS terminals
❺ BEAT CUT knob
Normally set to "1".
When beats occur when recording AM broadcasts, set this knob to the position where beats are least noticeable.
❻ PHONO terminals
❼ CD terminals
❽ AC OUTLETS (DR-E300BK for the U.S.A. and Canada only)
❾ Power cord
❿ Voltage selector*
When this equipment is used in an area where the supply voltage is different from the preset voltage, reset the voltage selector to the correct position.
⓫ AM channel spacing knob*
* Not provided for the U.S.A., Canada, U.K., Australia and Continental Europe.

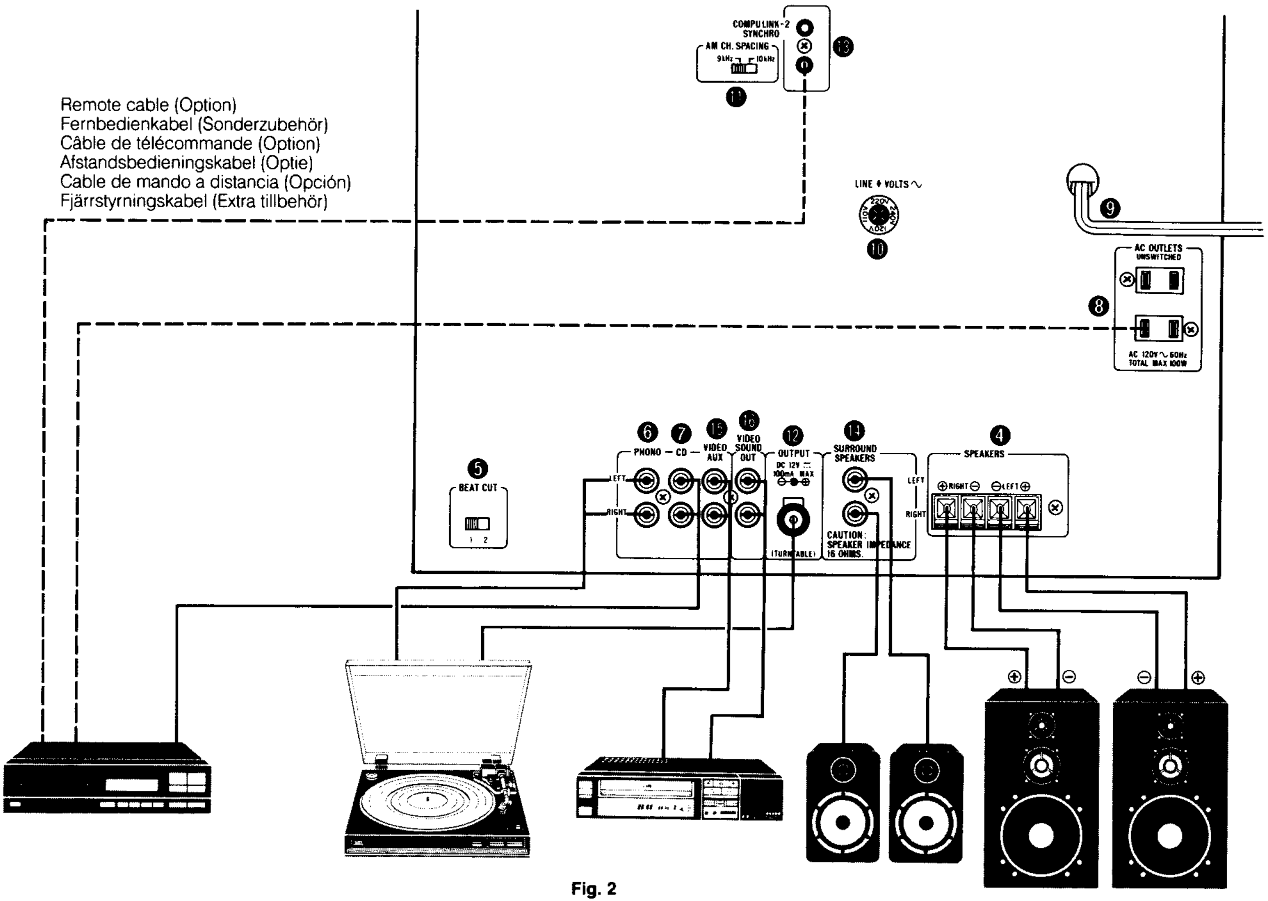
❶ Anschlüsse für externe Antenne (ANTENNA)
❷ Anschlüsse für externe Antenne (für Bundesrepublik Deutschland und Schweiz)
❸ MW/LW-Rahmenantenne
❹ Lautsprecheranschlüsse (SPEAKERS)
❺ Interferenzen-Schalter (BEAT CUT)
Normalerweise auf "1" stellen.
Wenn bei der Aufnahme von MW/LW-Sendungen Interferenzen auftreten, diesen Schalter so einstellen, daß die Interferenzen am wenigsten wahrnehmbar sind.
❻ Plattenspieler-Anschlüsse (PHONO)
❼ CD-Anschlüsse
❽ Netzausgang (AC OUTLETS) (nur DR-E300BK für die USA und Kanada)
❾ Netzkabel
❿ Spannungswähler*
Wenn die voreingestellte Netzspannung an diesem Gerät nicht mit der tatsächlich vorhandenen übereinstimmt, den Spannungswähler auf den erforderlichen Wert einstellen.
⓫ AM-Kanalabstandsschalter*
* Nicht vorhanden an Geräten für die USA, Kanada, Großbritannien, Australien und Kontinental-Europa.

❶ Bornes d'antenne externe (ANTENNA)
❷ Bornes d'antenne externe (ANTENNA) (Pour l'Allemagne de l'Ouest et la Suisse)
❸ Antenne AM à boucle
❹ Bornes de haut-parleurs (SPEAKERS)
❺ Commutateur coupe-battements (BEAT CUT)
Le placer normalement sur "1".
Si des battements se produisent lors d'enregistrements d'émissions AM, placer ce commutateur sur la position où les battements sont moindres.
❻ Bornes de platine tourne-disque (PHONO)
❼ Bornes de lecteur de disque audionumerique (CD)
❽ Prises CA (AC OUTLETS) (DR-E300BK pour les Etats-Unis et le Canada seulement)
❾ Cordon d'alimentation
❿ Sélecteur de tension*
Quand cet appareil est utilisé dans une région où la tension secteur est différente de celle qui est préréglée, replacer le sélecteur de tension sur la position correcte.
⓫ Bouton d'espacement des canaux AM*
* Non prévu sur les appareils destinés aux Etats-Unis, au Canada, au Royaume-Uni, à l'Australie et à l'Europe Continentale.

AANSLUITINGSSCHEME

DIAGRAMA DE CONEXIONES

KOPPLINGSDIAGRAM


COMPU LINK-2 SYNCHRO
AM CH. SPACING
9kHz 10kHz
⓫
⓭
LINE ♦ VOLTS ∿
220V 240V 110V 120V
❿
❾
AC OUTLETS UNSWITCHED
❽
AC 120V∿ 60Hz TOTAL MAX 100W
❻ ❼ ⓯ ⓰ ⓬ ⓮ ❹
❺
BEAT CUT
1 2
PHONO — CD — VIDEO AUX
VIDEO SOUND OUT
OUTPUT DC 12V 100mA MAX
(TURNTABLE)
SURROUND SPEAKERS
CAUTION: SPEAKER IMPEDANCE 16 OHMS
LEFT
RIGHT
SPEAKERS
⊕RIGHT⊖ ⊖LEFT⊕
⊕ ⊖ ⊖ ⊕

Remote cable (Option)
Fernbedienkabel (Sonderzubehör)
Câble de télécommande (Option)
Afstandsbedieningskabel (Optie)
Cable de mando a distancia (Opción)
Fjärrstyrningskabel (Extra tillbehör)

Fig. 2
Abb. 2
Afb. 2

❶ Buitenantenne-aansluitingen (ANTENNA)
❷ Externe ANTENNE aansluitingen (voor West-Duitsland en Zwitserland)
❸ AM-raamantenne
❹ Luidsprekeraansluitingen (SPEAKERS)
❺ BEAT CUT-schakelaar
Zet deze schakelaar gewoonlijk op "1". Stel deze schakelaar in een andere stand, wanneer tijdens ontvangst van AM-uitzendingen dreunende geluiden optreden, zodat dergelijke geluiden tot een minimum worden teruggebracht.
❻ Draaitafelaansluitingen (PHONO)
❼ CD-aansluitingen (CD)
❽ Netuitgangen (AC OUTLETS) (Alleen voor de DR-E300BK voor de V.S. en Canada)
❾ Netsnoer
❿ Spanningskeuzeschakelaar*
Zet de spanningskeuzeschakelaar in de juiste stand, wanneer deze apparatuur gebruikt wordt in een gebied, waar de voedingsspanning verschilt van de vooringestelde spanning.
⓫ AM-kanaalafstandschakelaar*
* Toestellen voor de V.S., Canada, Engeland, Australië en het Europese vasteland zijn niet met deze voorziening uitgerust.

❶ Terminales de antena externa (ANTENNA)
❷ Terminales de antena externa (ANTENNA) (para Alemania Federal y Suiza)
❸ Antena de cuadro AM
❹ Terminales de altavoces (SPEAKERS)
❺ Botón de corte de batidos
Normalamente, déjelo en "1".
Si se producen batidos durante la grabación de radiodifusiones en AM, utilice la posición donde los mismos sean menos perceptibles.
❻ Terminales fonográficos (PHONO)
❼ Terminales de audiodiscos digitales (CD)
❽ Tomas de CA (AC OUTLETS) (sólo DR-E300BK para EE.UU. y Canadá)
❾ Cordón de alimentación
❿ Selector de voltaje*
Cuando use este equipo en un área donde el suministro de voltaje es distinto del voltaje pre-ajustado, vuelva a ajustar el selector de voltaje en la posición correcta.
⓫ Perilla de espaciamiento de canales AM*
* No se provee en los equipos para EE.UU, Canadá, Reino Unido, Australia y Europa Continental.

❶ Yttre antennanslutningar
❷ Uttag för yttre antenn (ANTENNA) (för Västtysk-land och Schweiz)
❸ AM ramantenn
❹ Högtalaranslutningar SPEAKERS
❺ Interfernesomkopplare BEAT CUT
Skall normalt vara ställd i läge "1". Om störningar vid inspelning av MV/LV sändningar uppträder skall denna omkopplare ställas i det läge där störningarna hörs minst.
❻ PHONO anslutningar
❼ CD anslutningar
❽ (Ej för Skandinavien)
❾ Nätsladd
❿ (Ej för Skandinavien)
⓫ (Ej för Skandinavien)

⓬ DC OUTPUT terminal
Connect the turntable.
⓭ SYNCHRO terminal
⓮ SURROUND SPEAKER terminals
⓯ VIDEO/AUX terminals
⓰ VIDEO SOUND OUT terminals
Connect a VCR, DAT deck, etc. to these terminals to record TAPE, PHONO, TUNER or CD sound. In this case, connect the SOUND OUT terminals of VCR or DAT deck to the VIDEO/AUX terminals of this unit.

Notes:

1. **Connect the speaker cords correctly; L to L and R to R.**
2. **Switch the power off when connecting any component.**
3. **Connect plugs or wires firmly. Poor contact may result in hum.**
4. **The AC OUTLET provides power even when the front panel POWER button is off. Do not connect equipment requiring a total of more than 100 watts power.**
5. **Be sure to set this unit on top of the CD player when stacking them.**

⓬ DC OUTPUT-Buchse
Mit dem Plattenspieler verbinden.
⓭ SYNCHRO-Anschlüsse
⓮ Anschlüsse SURROUND SPEAKER
⓯ Anschlüsse VIDEO/AUX
⓰ Anschlüsse VIDEO SOUND OUT
Hier einen Videorecorder, DAT-Recorder etc. anschließen, um von TAPE, PHONO, TUNER oder CD aufzunehmen. In diesem Fall den Tonausgang von Videorecorder oder DAT-Recorder mit den VIDEO/AUX-Buchsen dieses Geräts verbinden.

Hinweise:

1. **Die Lautsprecherkabel richtig anschließen, L an L und R an R.**
2. **Vor dem Anschließen von anderen Geräten die Spannungsversorgung ausschalten.**
3. **Die Stecker und Kabel fest anschließen. Wackelkontakte führen zu Störgeräuschen.**
4. **Der Netzausgang (AC OUTLET) liefert Spannung, auch wenn der POWER-Schalter an der Frontplatte ausgeschaltet ist. Keine Geräte anschließen, die mehr als insgesamt 100 Watt aufnehmen.**
5. **Bei Aufstellung übereinander unbedingt dieses Gerät auf dem CD-Player plazieren.**

⓬ Borne DC OUTPUT
Raccorder la platine tourne-disque.
⓭ Borne SYNCHRO
⓮ Bornes de haut-parleur surround (SURROUND SPEAKER)
⓯ Bornes VIDEO/AUX
⓰ Bornes de sortie son vidéo (VIDEO SOUND OUT)
Raccorder un magnétoscope, une platine DAT, etc. à ces bornes pour enregistrer le son TAPE, PHONO, TUNER ou CD. Dans ce cas, raccorder les bornes SOUND OUT du magnétoscope ou de la platine DAT aux bornes VIDEO/AUX de cet appareil.

Remarques:

1. **Raccorder les câbles de haut-parleurs correctement, L sur L et R sur R.**
2. **Couper l'alimentation lors du raccordement d'un appareil quelconque.**
3. **Raccorder fermement les prises et câbles. Un mauvais contact peut produire des hurlements.**
4. **La prise AC OUTLET fournit de l'alimentation même quand l'interrupteur POWER du panneau avant est sur la position d'arrêt. Ne pas y raccorder d'appareil nécessitant une puissance supérieure à un total de 100 watts.**
5. **S'assurer de bien placer cet appareil au-dessus du lecteur de disque audionumérique en les empilant.**

ANTENNAS

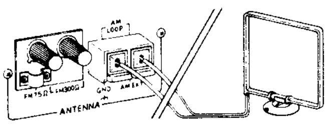


Fig. 3
Abb. 3
Afb. 3

ANTENNEN

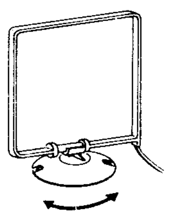


Fig. 4
Abb. 4
Afb. 4

ANTENNES

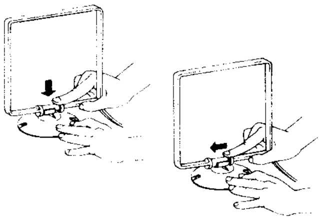


Fig. 5
Abb. 5
Afb. 5

AM (MW/LW) loop antenna (Fig. 3)
This antenna is for the reception of local AM broadcasts.

When too much noise occurs (Fig. 4)
Change the direction of the loop antenna or reinstall it.

How to fix an AM loop antenna (Fig. 5)

AM (MW/LW) external antenna (Fig. 6)
If AM reception is not good, connect an external AM antenna (single-wire antenna) to the AM terminal.

Notes:

- **If the provided loop antenna is not installed or the antenna cord touches the rear panel, it will be impossible to receive AM broadcasts.**
- **When installing an AM external antenna, leave the AM loop antenna connected.**
- **When using an AM external antenna, always connect a ground wire to the GND terminal for reduced noise.**

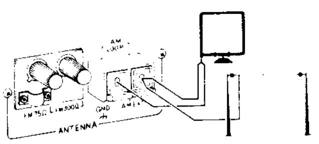


Fig. 6
Abb. 6
Afb. 6

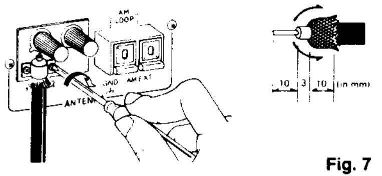


Fig. 7
Abb. 7
Afb. 7

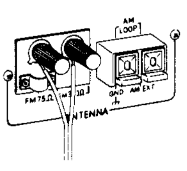


Fig. 8
Abb. 8
Afb. 8

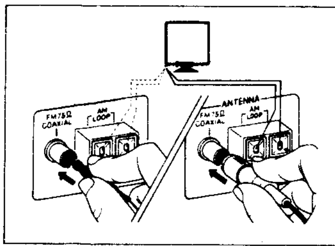


Fig. 9
Abb. 9
Afb. 9

FM antennas
(Fig. 7 & 8: Except for W. Germany and Switzerland)

- 75-ohm antenna with coaxial lead (Fig. 7)
  Loosen the screws on the bracket and insert the cable into the ring from below. Then connect the stripped core to the upper screw terminal. The bracket ring works as the ground terminal.
- Feeder antenna (supplied with this unit) (Fig. 8)
  Connect to the 300-ohm terminal
  Take care that the wires of the feeder antenna do not touch any other terminal.
- For best FM reception using the feeder antenna provided, place the antenna in a location where reception is strongest. Make sure the antenna is fully extended in the form of a "T".

For W Gerrmany and Switzerland
Using the IEC-type antenna terminal (Fig. 9)
The IEC-type antenna terminal of this model can be used for reception of FM broadcasts. Connect this terminal to the terminal labelled RADIO of the house antenna. The appropriate connecting cable is DIN 45 332. For more details, consult your dealer.

FM wire antenna (Fig. 9: for W. Germany)
The FM wire antenna provided can be connected to the 75-ohm coaxial jack temporarily.

How to connect the FM connector (for Switzerland and Italy)
In case of a 75-ohm antenna (Fig. 11)

1. Remove the case by pressing both sides.
2. Fix the coaxial lead.
3. Tighten the stripped core.
4. Remove the ring and fix it to the rear of the case to avoid losing it.
5. Install the case.

In case of a 300-ohm antenna (Fig. 10)
If you have removed the ring, install it back in its position.

TIPS FOR BETTER FM RECEPTION
Try to find the most suitable antenna for the best possible performance of your tuner.

- An outdoor antenna which has more elements has a higher gain and a sharper directivity.
- Find the direction in which multi-path interference is at its least: set the 16 kHz S.E.A. knob at the maximum and the 63 Hz and 250 Hz knobs at the minimum, then listen to a broadcast at a relatively high volume level, and set the antenna so that distortion and unwanted noise are minimized.

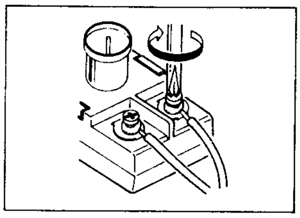
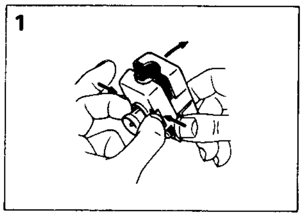
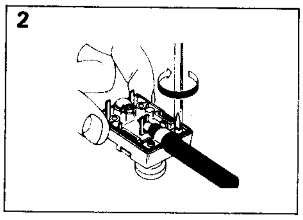
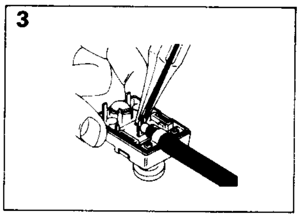
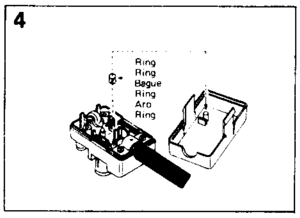


Fig. 10
Abb. 10
Afb. 10









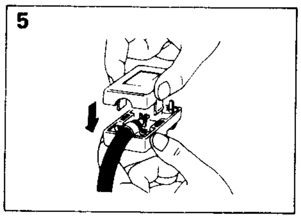


Fig. 11
Abb. 11
Afb. 11

DESCRIPTION AND FUNCTIONS

❶ **FM/AM indicator**
"FM" is displayed when an FM broadcast is received, and "AM" is displayed during AM broadcast reception.

❷ **Frequency indicator**
The tuned in frequency is displayed digitally. Three or four digits (kHz) are displayed during AM reception and five digits (MHz) (for Europe, U.K., Australia and other countries) or four digits (MHz) (for U.S.A. and Canada) are displayed during FM reception.

❸ **TUNER PRESET indicator**
This shows the preset channel selected by the numeric keypad, for a total of 40 FM and AM stations. It also shows the station number to be programmed while programming or monitoring programmed broadcasts.

❹ **STEREO indicator**
When an FM stereo broadcast is being received, this indicator lights. When the MODE indicator shows MONO even if an FM stereo broadcast is received, this indicator will not light; press the FM MODE/MUTE button so that AUTO is shown.

❺ **FM MODE indicator**
This indicator shows AUTO or MONO according to the setting of the FM MODE/MUTE button.

❻ **FM MUTE indicator**
This indicator shows ON or OFF according to the setting of the FM MODE/MUTE button.

❼ **MEMORY indicator**
When the MEMORY button is pressed, this indicator Lights for about 5 seconds. When the AUTO MEMORY button is pressed, this indicator blinks for about 5 seconds.

BESCHREIBUNG UND FUNKTIONEN

❶ **FM/AM-Anzeige**
Bei FM-Empfang wird FM angezeigt, bei AM-Empfang AM.

❷ **Frequenzanzeige**
Die abgestimmte Frequenz wird numerisch angezeigt. Vier Ziffern (kHz) zeigen AM-Empfang an. Fünf Ziffern (MHz) (für Europa, Australien und andere Länder) oder vier Ziffern (MHz) (für die USA und Kanada) zeigen FM-Empfang an.

❸ **Tuner-Senderspeicheranzeige (TUNER PRESET)**
Zeigt die Nummer des über die Zifferntasten angewählten Senderspeichers an, für insgesamt 40 Senderspeicher (FM/AM). Zeigt auch die Sendernummer bei Programmierung oder bei Programm-Überprüfung an.

❹ **Stereoanzeige (STEREO)**
Diese Anzeige leuchtet bei Empfang einer FM-Stereo-Sendung. Wenn die MODE-Anzeige auch bei Empfang einer FM-Stereo-Übertragung MONO anzeigt, leuchtet diese Anzeige nicht. Die FM MODE/MUTE-Taste betätigen, um auf AUTO zu schalten.

❺ **FM-Betriebsartanzeige (FM MODE)**
Diese Anzeige zeigt AUTO oder MONO an, je nach Stellung der FM MODE/MUTE-Taste.

❻ **FM-Stumabstimmanzeige (FM MUTE)**
Diese Anzeige zeigt ON (Ein) oder OFF (Aus) an, je nach Stellung der FM MODE/MUTE-Taste.

❼ **Speicheranzeige (MEMORY)**
Nach Betätigen der MEMORY-Taste leuchtet diese Anzeige für ca. 5 Sekunden. Nach Betätigen der AUTO MEMORY-Taste blinkt diese Anzeige für ca. 5 Sekunden.

DESCRIPTION ET FONCTIONS

❶ **Indicateur FM/AM**
"FM" est affiché quand une émission FM est reçue, et "AM" est affiché pendant la réception d'une émission AM.

❷ **Indicateur de fréquence**
La fréquence syntonisée est affichée de façon numérique. Quatres chiffres (kHz) sont affichés en réception AM, cinq chiffres (MHz) (pour l'Europe, le Royaume-Uni, l'Australie et d'autres pays) ou quatre chiffres (MHz) (pour les Etats-Unis et le Canada) sont affichés pendant la réception FM.

❸ **Indicateur de préréglage de syntonisation (TUNER PRESET)**
Il indique le canal préréglé sélectionné par le clavier numérique, pour un total de 40 stations FM et AM. Il Indique également le numéro de station programmé pendant la programmation ou le contrôle des émissions programmées.

❹ **Indicateur STEREO**
Quand une émission FM stéréo est reçue, cet indicateur s'allume. Quand l'indicateur MODE montre "MONO", il ne sera pas allumé même si une émission FM stéréo est reçue. Pour recevoir l'émission en stéréo, appuyer sur la touche FM MODE/MUTE pour que "AUTO" apparaisse.

❺ **Indicateur FM MODE**
Cet indicateur montre AUTO ou MONO en fonction du réglage de la touche FM MODE/MUTE.

❻ **Indicateur FM MUTE**
Cet indicateur montre ON ou OFF en fonction du réglage de la touche FM MODE/MUTE.

❼ **Indicateur de mémoire (MEMORY)**
S'allume pendant environ cinq secondes quand la touche MEMORY est pressée. Clignote pendant environ cinq secondes quand la touche AUTO MEMORY est pressée.

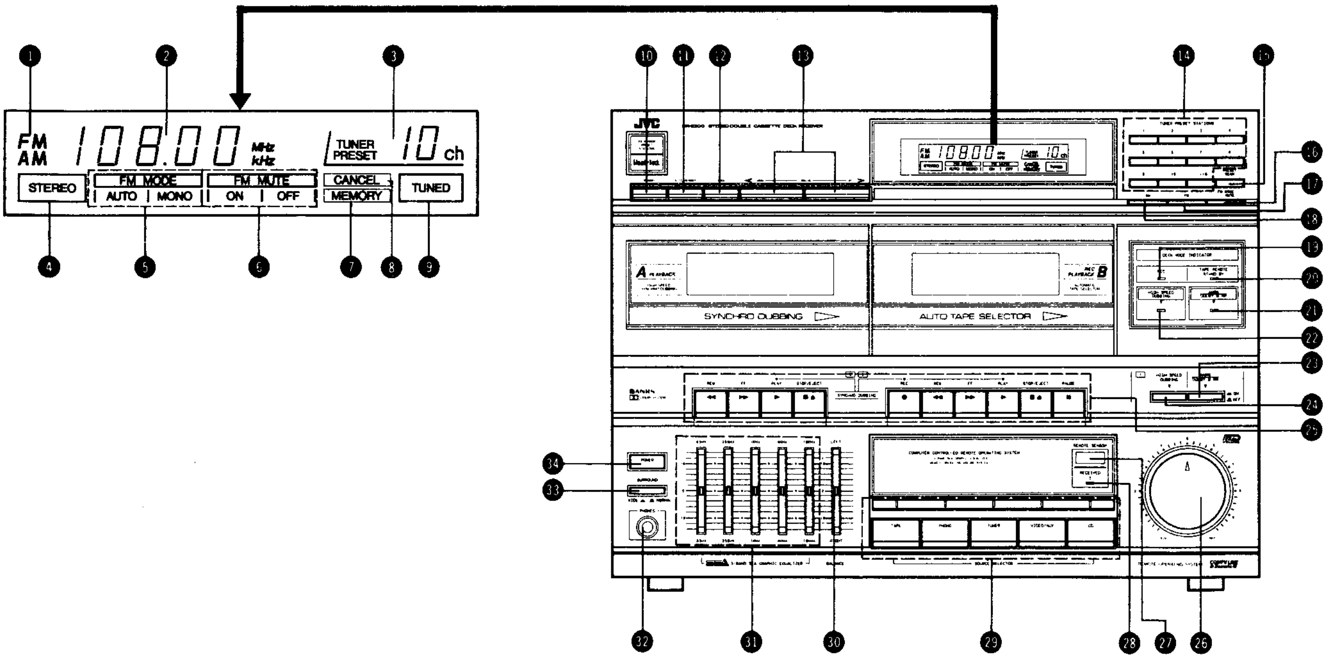


Fig. 12
Abb. 12
Afb. 12

⑧ **CANCEL indicator**
This indicator lights when the CANCEL button is pressed to erase the preset station memory.

⑨ **TUNED indicator**
If a broadcast is received correctly, this indicator lights.

⑩ **MEMORY**
When this button is pressed, the MEMORY indicator will light for about 5 seconds to show that the memory is ready to receive preset station information. Press one of the PRESET STATIONS buttons while the MEMORY indicator is lit.

Note:
- **After the MEMORY indicator has gone out, pressing the PRESET STATIONS button will not store the frequency in memory; in this case, press this button again.**

⑪ **AUTO MEMORY**
Press this button so that the MEMORY indicator blinks. Now select the desired PRESET STATION button with the numeric keypad while the MEMORY indicator blinks; the tuner scans the frequencies in the order of increasing frequency and, when a broadcast is detected, the TUNER PRESET display blinks for about 4 seconds. If you don't want to store the frequency of the broadcast in memory, press this button again within 4 seconds; the auto memory operation will start again. If the button is not pressed, after the MEMORY indicator blinks for 4 seconds, the current frequency is stored in the memory of desired PRESET STATION button, and scanning restarts. The same function if repeated for all channels. When the frequency is scanned to the top of the band, the auto memory function stops and the channel number in which the highest frequency is stored is displayed. If no frequencies have been stored, the top frequency in the band will be displayed. When all channel memories have frequencies stored in them, the last frequency is tuned to and its channel number is shown. For more details, refer to "How to operate the auto memory function" on page 27.

Notes:
- **Auto memory will not function if the preset channel number is input with the numeric keypad after the MEMORY indicator has gone out.**

Note: (For DR-E300LBK only)
- **If the auto memory operation is started in the LW band, and the upper limit frequency is reached (353 kHz or 290 kHz), it will automatically transfer to the lowest frequency in the MW band, and the auto-memory operation will continue. (See pages 41 and 42.)**

⑫ **CANCEL**
When this button is pressed, the CANCEL indicator will light for about 5 seconds. Pressing a preset station button while the CANCEL indicator is lit will erase the memory for the station that was assigned to that button.

⑬ **TUNING**
DOWN (<): To lower receiving frequency, press this button.
Up (>): To raise receiving frequency, press this button.

⑧ **Löschanzeige (CANCEL)**
Nach Betätigen der CANCEL-Taste leuchtet diese Anzeige für ca. 5 Sekunden.

⑨ **Abstimmanzeige (TUNED)**
Wenn ein Sender korrekt empfangen wird, leuchtet diese Anzeige.

⑩ **Speichertaste (MEMORY)**
Nach Betätigen dieser Taste leuchtet die MEMORY-Anzeige für 5 Sekunden. Dies signalisiert die Eingabebereitschaft für die Belegung von Senderspeichern. Bei leuchtender MEMORY-anzeige eine der PRESET STATIONS-Tasten betätigen.

Hinweis:
- **Nach Erlöschen der MEMORY-Anzeige ist bei Betätigen einer PRESET STATIONS-Taste keine Senderspeicherbelegung mehr möglich. In diesem Fall diese Taste erneut betätigen.**

⑪ **Automatische Speicherung (AUTO MEMORY)**
Betätigen, so daß die MEMORY-Anzeige blinkt. Bei blinkender MEMORY-Anzeige den gewünschten Speicherplatz über die Zifferntasten eingeben. Automatisch wird der Frequenzbereich in aufsteigender Folge abgetastet. Bei Erreichen einer Senderfrequenz blinkt die Senderspeicheranzeige für ca. 4 Sekunden. Ist diese Frequenz nicht für die Speicherung vorgesehen, diese Taste nochmals innerhalb der 4 Sekunden betätigen, damit die Automatik-Speicherfunktion erneut ausgelöst wird. Wenn nach dem 4-Sekunden-Blinksignal diese Taste nicht betätigt wird, erfolgt Speicherung der vorliegenden Frequenz im Senderspeicher, und der Suchlauf wird fortgesetzt. Diese Funktion erfolgt für alle Speicherplätze. Erreicht die Frequenzabtastung das obere Ende des Empfangsbandes, wird die Automatikspeicherung gestoppt und es erfolgt die Anzeige für den Speicherplatz mit der höchten Speicherfrequenz. Wurden keine Frequenzen gespeichert, erscheint die Anzeige für die höchste Frequenz des vorliegenden Empfangsbandes. Wurden alle Speicherplätze belegt, wird die letzte Frequenz eingestellt und deren Speicherplatznummer angezeigt. Weitere Angaben hierzu siehe Abschnitt "Betrieb mit der Automatikspeicherung" auf Seite 27.

Hinweise:
- **Die Automatik-Speicherung arbeitet nicht, wenn der Speicherplatz über die Zifferntasten eingegeben wird, nachdem die MEMORY-Anzeige erloschen ist.**

Hinweis: (Im Falle von Modell DR-E300LBK)
- **Wenn im LW-Band auf automatische Speicherung geschaltet wird und die Frequenz ihre obere Grenze erreicht (353 kHz oder 290 kHz), erfolgt automatisch die Umschaltung auf die niedrigste Frequenz des MW-Bandes und Fortsetzung des automatischen Speicherbetriebs. (Siehe Seite 41 und 42.)**

⑫ **Löschtaste (CANCEL)**
Nach Betätigen dieser Taste leuchtet die CANCEL-Anzeige für ca. 5 Sekunden. Wird innerhalb dieser Zeit eine Senderspeichertaste betätigt, erfolgt die Löschung des für diesen Speicher gehaltenen Senders.

⑬ **Abstimmtasten (TUNING)**
DOWN (<): Zum Verringern der Empfangsfrequenz diese Taste drücken.
UP (>): Zum Erhöhen der Empfangsfrequenz diese Taste drücken.

⑧ **Indicateur CANCEL**
Cet indicateur s'allume quand la touche CANCEL est pressée pour effacer la mémoire de station préréglée.

⑨ **Indicateur d'accord (TUNED)**
Quand une émission est reçue correctement, cet indicateur s'allume.

⑩ **Mémoire (MEMORY)**
Si cette touche est pressée, l'indicateur MEMORY s'allumera pendant environ 5 secondes pour montrer que la mémoire est prête à recevoir des informations sur la station préréglée. Appuyer sur une des touches PRESET STATIONS pendant que l'indicateur MEMORY est allumé.

Remarque:
- **Si la touche PRESET STATIONS est pressée après l'extinction de l'indicateur MEMORY, la fréquence ne sera pas mise en mémoire; dans ce cas, appuyer à nouveau sur cette touche.**

⑪ **Mémoire automatique (AUTO MEMORY)**
Appuyer sur cette touche pour que l'indicateur MEMORY clignote. Alors sélectionner le canal préréglé voulu avec le clavier numérique pendant que l'indicateur MEMORY clignote; le syntoniseur balaie les fréquences dans l'ordre croissant et quand une émission est détectée, l'affichage du canal préréglé clignote pendant environ 4 secondes. Si vous ne voulez pas mettre en mémoire la fréquence de l'émission, appuyer à nouveau sur cette touche dans les quatre secondes; le fonctionnement de mémoire automatique recommencera. Si la touche n'est pas pressée, après l'indicateur MEMORY clignote pendant 4 secondes, la fréquence courante est mise dans la mémoire du canal préréglé voulu, et le balayage reprend. La même fonction est répétée pour tous les canaux. Quand la fréquence du haut de la gamme est atteinte, la fonction de mémoire automatique s'arrête et le numéro de canal pour lequel la fréquence la plus élevée est mémorisée est affiché. Si aucune fréquence n'a été mémorisée, la fréquence supérieure de la gamme est affichée. Quand toutes les mémoires de canaux contiennent des fréquences, la dernière fréquence est syntonisée et son numéro de canal est montré.
Pour plus de détails, se reporter à "Fonctionnement de la mémoire automatique" en page 27.

Remarque:
- **La mémoire automatique ne fonctionnera pas si le numéro de canal préréglé est entré avec le clavier numérique après l'extinction de l'indicateur MEMORY.**

Remarque: (Pour DR-E300LBK seulement)
- **Si la mémoire automatique est lancée dans la bande GO, quand la fréquence limite supérieure est atteinte (353 kHz ou 290 kHz), elle sera automatiquement transférée à la fréquence inférieure de la bande PO, et le fonctionnement de la mémoire automatique continuera. (Voir pages 41 et 42.)**

⑫ **Annulation (CANCEL)**
Quand cette touche est pressée, l'indicateur CANCEL s'allumera pendant environ cinq secondes. Une pression sur une touche de station préréglée pendant que l'indicateur CANCEL est allumé effacera la mémoire pour la station qui était assignée à cette touche.

⑬ **Syntonisation (TUNING)**
DOWN (<): Appuyer sur cette touche pour syntoniser sur une fréquence plus basse.
UP (>): Appuyer sur cette touche pour syntoniser sur une fréquence plus élevée.

DR-E300BK: Each time that you press this button, the FM frequency will change by a 50 kHz or 100 kHz step, and AM frequency by a 9 kHz or 10 kHz step.
DR-E300LBK: Each time that you press this button, the FM frequency will change by a 50 kHz step, MW by 9 kHz step, and LW by a 1 kHz step. This unit is constructed so that MW and LW can be changed automatically by pressing the tuning button. For LW, if you want to raise the frequency, it can be changed automatically from 353 kHz to 522 kHz. Conversely, if you wish to lower the frequency, it can be automatically changed from 522 kHz to 353 kHz. (For Italy from 522 kHz to 290 kHz).
Pressing either button for more than 1 second and then releasing it starts auto tuning, when a broadcast is received, tuning will stop. If either button is kept held in, scanning continues even when a broadcast is received. In auto tuning, pressing either button stops scanning. During tuning toward higher frequencies, when the upper limit frequency (108.0 MHz for FM) is reached, the frequency will change to the lower limit (87.50 MHz for FM) and then auto tuning restarts in the direction of increasing frequency. During tuning toward lower frequencies, when the lower limit (87.50 MHz for FM) is reached, the frequency will change to the upper limit (108.0 MHz for FM) and auto tuning restarts in the direction of lower frequencies. The same operation is performed in AM tuning.

Channel spacing

Band / Area	FM	AM (MW)	AM (LW)
U.S.A., Canada	100 kHz	10 kHz	—
Europe, UK	50 kHz	9 kHz	1 kHz
Australia	50 kHz	9 kHz	—
Other areas	50 kHz	9 kHz or 10 kHz	—

An AM channel spacing switch is provided on the rear panel for selecting 9 kHz or 10 kHz steps according to your area.
(Not provided on tuners for the U.S.A., Canada, U.K., Australia and Continental Europe.)

Note:
- **Before changing over the channel spacing switch, be sure to set the POWER button to OFF.**

Example
Beispiel
Exemple
Voorbeeld
Ejemplo
Exempel

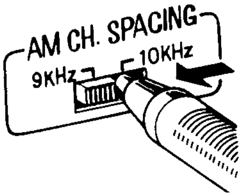


Fig. 13
Abb. 13
Afb. 13

To switch over, use the tip of a ball-point pen as shown in Fig. 13.

⑭ **Preset channel numeric keypad ([1] to [10], [+10])**
Up to 40 FM or AM broadcast stations can be preset with this unit. After presetting, select the desired channel by inputting the preset channel number with these buttons. When selecting a preset channel numbered "1" to "10", just press the corresponding numeric keypad. When selecting preset channels numbered 11 or above, first press the [+10] button the required number of times, then press a button from [1] to [10]. When the desired preset channel is recalled, the display shows the preset channel number and the corresponding frequency.

DR-E300BK: Bei jedem Druck auf diese Taste ändert sich die FM-Frequenz um jeweils 50 kHz, bzw. 100 kHz, die AM-Frequenz um jeweils 9 kHz, bzw. 10 kHz.
DR-E300LBK: Bei jedem Druck auf diese Taste ändert sich die FM-Frequenz um jeweils 50 kHz, die MW-Frequenz um 9 kHz und die LW-Frequenz um 1 kHz. Durch Tastendruck kann abwechselnd zwischen MW und LW umgeschaltet werden. Für LW kann so automatisch die Frequenz von 353 kHz auf 522 kHz gewechselt werden. Umgekehrt kann die Frequenz automatisch von 522 kHz auf 353 kHz (290 kHz für Italien) gewechselt werden.

Wird eine der Tasten für mehr als eine Sekunde gedrückt gehalten und dann freigegeben, startet die automatische Abstimmung. Bei Empfang einer Senderfrequenz hält die Abstimmung an. Wird die Taste gedrückt gehalten, wird auch bei Senderempfang weiter abgetastet. Bei automatischer Abstimmung unterbricht die Betätigung einer der Tasten den Abtastvorgang. Bei Abstimmung in Richtung höherer Frequenzen schaltet die Frequenz bei Erreichen des oberen Empfangsbandendes (108,0 MHz bei UKW) zum unteren Empfangsbandende um (87,50 MHz bei UKW). Hier wird dann erneut die Automatik-Abstimmung in Richtung höherer Frequenzen gestartet. Bei Abstimmung in Richtung niedrigerer Frequenzen schaltet die Frequenz entsprechend bei Erreichen des unteren Empfangsbandendes (87,50 MHz bei UKW) zum oberen Empfangsbandende um (108,0 MHz bei UKW). Hier wird dann erneut die Automatik-Abstimmung in Richtung niedrigerer Frequenzen gestartet. Dieser Ablauf gilt entsprechend für die MW-Abstimmung.

Kanalabstände

Band / Bereich	FM	AM (MW)	AM (LW)
USA, Kanada	100 kHz	10 kHz	—
Europa, Großbritannien	50 kHz	9 kHz	1 kHz
Australien	50 kHz	9 kHz	—
Andere Länder	50 kHz	9 kHz oder 10 kHz	—

Mit dem AM-Kanalabstandsschalter an der Rückplatte lassen sich die Frequenzsprünge wie erforderlich auf 9 kHz oder 10 kHz einstellen.
(Nicht vorhanden an in den USA, Kanada, Australien und Europa ausgelieferten Modellen.)

Hinweis:
- **Vor Verwendung des Kanalabstandsschalters erst das Gerät mit der POWER-Taste abschalten.**

Verwenden Sie zum Umschalten die Spitze eines Kugelschreibers, wie in Abb. 13 gezeigt.

⑭ **Numerische Senderspeichertasten ([1]— [10], [+10])**
Dieses Gerät ist für die Senderspeicherung von 40 FM- oder AM-Sendern ausgelegt. Nach der Senderspeicherbelegung können Sender über diese Tasten abgerufen werden. Für die Senderspeicher "1" bis "10" einfach die entsprechende numerische Taste betätigen. Für höhere Eingaben (ab 11) zuerst Taste [+10] so oft wie erforderlich antippen, dann die Einerstelle mit einer der Tasten [1] bis [10] eingeben.
Bei Abruf des Senderspeichers werden Senderspeichernummer und Frequenz angezeigt.

DR-E300BK: A chaque pression sur cette touche, la fréquence FM est modifiée de 50 ou 100 kHz, et la fréquence AM de 9 ou 10 kHz.
DR-E300LBK: A chaque pression sur cette touche, la fréquence FM est modifiée de 50 kHz, la fréquence PO de 9 kHz, et la fréquence GO de 1 kHz. Cet appareil est conçu de façon à ce que les PO et les GO se commutent automatiquement sur simple pression de la touche de syntonisation. Pour augmenter la fréquence des GO, il est possible de passer automatiquement de 353 kHz à 522 kHz. Pour au contraire diminuer la fréquence, il est possible de passer directement de 522 kHz à 353 kHz. (Pour l'Italie de 522 kHz à 290 kHz)

Tenir pressée une touche pendant plus d'une seconde et la relâcher fait partir la syntonisation automatique. Quand une émission est reçue, le balayage s'arrête. Si une touche est maintenue pressée, le balayage continue même quand une émission est reçue. En syntonisation automatique, une pression sur l'une des touches arrête le balayage. Pendant la syntonisation vers des fréquences plus élevées, quand la limite supérieure (108,0 MHz pour FM) est atteinte, la fréquence sera changée à la limite inférieure (87,50 MHz pour FM) et puis la syntonisation automatique reprend en fréquences croissantes. Pendant la syntonisation vers des fréquences plus basses, quand la limite inférieure (87,50 MHz pour FM) est atteinte, la fréquence sera changée à la limite supérieure (108,0 MHz pour FM) et puis la syntonisation automatique reprend en fréquences décroissantes. Le même fonctionnement est effectué en syntonisation AM.

Espacement des canaux

Gamme / Pays	FM	AM (PO)	AM (GO)
Etats-Unis, Canada	100 kHz	10 kHz	—
Europe, Royaume-Uni	50 kHz	9 kHz	1 kHz
Australie	50 kHz	9 kHz	—
Autres pays	50 kHz	9 kHz ou 10 kHz	—

Un commutateur d'espacement des canaux AM est situé sur le panneau arrière pour la sélection de pas de 9 kHz ou 10 kHz selon le pays ou la région. (N'est pas prévu sur les syntoniseurs destinés aux Etats-Unis, au Canada, au Royaume-Uni, à l'Australie et à l'Europe Continentale)

Remarque:
- **Avant de changer la position du commutateur d'espacement des canaux, s'assurer de bien mettre l'interrupteur POWER sur OFF.**

Pour changer, utiliser la pointe d'un stylo-bille comme montré en Fig. 13.

⑭ **Clavier numérique des canaux préréglés ([1] à [10], [+10])**
Jusqu'à 40 fréquences d'émissions FM et AM peuvent être préréglées avec cet appareil. Après préréglage, sélectionner le canal voulu en entrant le numéro de canal préréglé avec ces touches. Pour sélectionner un canal préréglé numéroté de "1" à "10", appuyer simplement sur la touche numérique correspondante. Pour sélectionner les canaux préréglés à partir de 11 et au-dessus, appuyer d'abord sur la touche [+10] le nombre de fois requis, puis appuyer sur une touche de [1] à [10].
Quand le canal préréglé voulu est rappelé, l'affichage indique le numéro de canal préréglé et la fréquence correspondante.

⑮ **PRESET SCAN**
This lets you scan preset channels to find a broadcast you want to listen to. When the PRESET SCAN button is pressed, preset scanning starts. If you have tuned to the current station using the 10 KEY keypad, the tuner scans to the next higher preset channel and the broadcast is received for about 4 seconds with the preset channel number blinking. It then tunes to higher preset channels in sequence. When it reaches the top preset channel, it moves to the bottom channel and scans up until it reaches the original channel, at which point it stops. If you have tuned to the current station in any other way, scanning will start from preset channel 1 and finished after preset channel 40 has been received, then the broadcast being received before preset scanning was started will be heard again. When you hear your required broadcast, press the PRESET SCAN button again to stop preset scanning. During preset scanning, preset channels which have been cancelled using the preset cancel function will not be received.

⑯ **FM MODE/MUTE**
Press this button so that FM MODE "AUTO" and FM MUTE "ON" light in the display for normal FM reception for weak or noisy FM stereo broadcast, press this button so that FM MODE "MONO" and FM MUTE "OFF" in the display light. The broadcast will be heard in mono but the clarity of reception will be improved.

⑰ **FM**
Press this button to listen to the FM broadcast.

⑱ **AM (DR-E300BK), AM (MW/LW) (DR-E300LBK)**
Press this button to listen to the AM (MW/LW) broadcast.

⑲ **REC indicator**
This indicator lights when deck B is in the record or record-pause mode.

⑳ **REMOTE STANDBY indicator**
This indicator blinks when the TAPE STOP (■) button on the remote control unit is pressed while playing back or recording a tape.
Pressing the TAPE PLAY (▶) button again resumes tape play or recording and the indicator goes off.

㉑ **ANRS DOLBY B NR indicator**
This indicator lights when the Dolby Noise Reduction system is engaged.

㉒ **HIGH SPEED DUBBING indicator**
This indicator lights when high-speed dubbing operation is engaged.

㉓ **ANRS/DOLBY B NR**
ON (▬): Press this button to this position when recording with the ANRS/DOLBY B NR system of playing back a tape recorded with these systems.
OFF (▆): Press this button to this position when the ANRS/DOLBY B NR system is not used.
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

⑮ **Senderspeicher-Suchlauftaste (PRESET SCAN)**
Mit dieser Taste können Sie die Speichersender nach einem Rundfunkprogramm absuchen, das Ihnen zusagt. Durch Drücken der Taste PRESET SCAN wird der Speichersendersuchlauf gestartet. Ist der aktuelle Sender mit den Speichersendertasten gewählt worden, stimmt der Tuner den nächsthöheren Speichersender ab, der dann vier Sekunden lang empfangen wird, wobei die zugehörige Nummer blinkt. Danach werden sämtliche Speichersender in aufsteigender Reihenfolge bis zum Skalenende abgesucht. Von dort springt der Sendersuchlauf zum Speichersender am Skalenanfang und sucht wieder in Aufwärtsrichtung, bis er schließlich beim ursprünglich eingestellten Kanal stoppt. Ist der aktuelle Sender auf andere Weise abgestimmt worden, beginnt der Speichersendersuchlauf bei Speichersender 1 und stoppt bei Speichersender 40. Anschließend ist wieder das vor Auslösen des Suchlaufs eingestellte Programm zu hören. Sobald das gewünschte Programm empfangen wird, zum Ausschalten der Suchlauffunktion die Taste PRESET SCAN erneut drücken. Während des Speichersendersuchlaufs werden zuvor gelöschte Speichersender übersprungen.

⑯ **FM-Betriebsart/Stummabstimmtaste (FM MODE/MUTE)**
Bei FM-Empfang leuchten nach Betätigen dieser Taste die Anzeige AUTO für FM MODE und ON für FM MUTE, wobei automatische Stummabstimmung erfolgt, benachbarte Sender also unterdrückt werden. Bei schwachem oder gestörtem FM-Stereo-Empfang kann über diese Taste die Anzeige MONO für FM MODE und OFF für FM MUTE abgerufen werden. Der Empfang erfolgt dann in Mono, die Empfangsqualität ist jedoch verbessert.

⑰ **FM-Taste (FM)**
Betätigen, um FM-Sender zu empfangen.

⑱ **AM (MW/LW)-Taste (AM (DR-E300BK)) (AM (MW/LW)(DR-E300LBK))**
Betätigen, um AM-Sender (MW/LW-Sender) zu empfangen.

⑲ **Aufnahmeanzeige (REC)**
Diese Anzeige leuchtet, wenn Cassettenteil B auf Aufnahme oder Aufnahmepause geschaltet ist.

⑳ **Fernbedienungs-Betriebsbereitschaftsanzeige (REMOTE STANDBY)**
Diese Anzeige blinkt, wenn bei Bandwiedergabe oder Bandaufnahme die Taste TAPE STOP (■) der Fernbedienung gedrückt wird.
Durch erneutes Drücken der Taste TAPE PLAY (▶) wird die Bandwiedergabe oder -aufnahme fortgesetzt, und die Anzeige erlishct.

㉑ **ANRS/Dolby B-Anzeige (ANRS/DOLBY B NR)**
Diese Anzeige leuchtet, wenn die Dolby-Rauschunterdrückung aktiviert ist.

㉒ **Anzeige für High Speed-Überspielen (HIGH SPEED DUBBING)**
Diese Anzeige leuchtet, wenn der Überspielbetrieb bei erhöhter Geschwindigkeit erfolgt.

㉓ **ANRS/Dolby B-Schalter (ANRS/DOLBY B NR)**
ON (▬): Für Aufnahme oder Wiedergabe mit ANRS/DOLBY B-Rauschunterdrückung.
OFF (▆): Zur Abschaltung der ANRS/DOLBY B-Raushunterdrückung diese Taste nochmals betätigen.
* Dolby Rauschunterdrückung wird hergestellt unter Lizenz der Dolby Laboratories Licensing Corporation.
DOLBY und das Doppel-D-Symbol DD sind eingetragene Warenzeichen der Dolby Laboratories Licensing Coeporation.

⑮ **Balayage des stations préréglées (PRESET SCAN)**
Cette touche permet le balayage des stations préréglées pour trouver l'émission que vous voulez écouter. Quand la touche PRESET SCAN est pressée, le balayage des préréglages commence. Si vous avez syntonisé sur la station courante en utilisant le clavier 10 KEY, le syntoniseur passe au prochain canal préréglé plus élevé et l'émission est reçue pendant environ 4 secondes avec le numéro de canal préréglé clignotant. Puis les canaux préréglés plus élevés sont syntonisés en séquence. Quand le canal le plus élevé est atteint, le syntoniseur passe au canal le plus bas et remonte jusqu'au canal de départ où il s'arrête. Si vous avez syntonisé sur la station courante d'une autre façon, le balayage commencera par le canal préréglé 1 et s'arrêtera après avoir reçu le canal préréglé 40, puis l'émission reçue avant le démarrage du balayage des stations est syntonisée à son tour. Quand vous entendez l'émission voulue, appuyer à nouveau sur la touche PRESET SCAN pour arrêter le balayage des préréglages. Pendant le balayage des préréglages, les canaux préréglés qui ont été annulés en utilisant la fonction d'annulation de préréglage ne seront pas reçus.

⑯ **Touche de mode FM/Silencieux (FM MODE/MUTE)**
Appuyer sur cette touche pour que "AUTO" de FM MODE et "ON" de FM MUTE s'allument dans l'affichage pour la réception FM normale. Pour une émission stéréo FM faible ou bruitée, appuyer sur cette touche pour que "MONO" de FM MODE et "OFF" de FM MUTE s'allument dans l'affichage. L'émission sera entendue en mono, mais la qualité de la réception sera améliorée.

⑰ **FM**
Appuyer sur cette touche pour écouter une émission FM.

⑱ **AM (DR-E300BK), AM PO/GO (DR-E300LBK)**
Appuyer sur cette touche pour écouter une émission AM (PO/GO).

⑲ **Indicateur REC**
Cet indicateur s'allume quand la platine B est en mode d'enregistrement ou de pause-enregistrement.

⑳ **Indicateur d'attente de télécommande (REMOTE STANDBY)**
Cet indicateur clignote quand la touche TAPE STOP (■) sur le boîtier de télécommande est pressée pendant la lecture ou l'enregistrement d'une bande.
Une nouvelle pression sur la touche TAPE PLAY (▶) relance la lecture ou l'enregistrement sur la bande et l'indicateur s'éteint.

㉑ **Indicateur ANRS DOLBY B NR**
Cet indicateur s'allume quand le système de réduction de bruit Dolby est en service.

㉒ **Indicateur de copie à grande vitesse (HIGH SPEED DUBBING)**
Cet indicateur s'allume quand la copie à grande vitesse est engagée.

㉓ **Commutateur de système de réduction de bruit (ANRS/DOLBY B NR)**
ON (▬): Appuyer sur cette touche pour enregistrer avec le système de réduction de bruit ANRS/DOLBY B ou pour lire une bande enregistrée avec ce système.
OFF (▆): Appuyer sur cette touche quand le système ANRS/DOLBY B n'est pas utilisé.
* Réduction de bruit Dolby fabriquée sous licence de Dolby Laboratories Licening Corporation.
DOLBY et le symbole double-D DD sont des marques déposées de Dolby Laboratories Licensing Corporation.

㉔ **HIGH SPEED DUBBING**
Press this button for high-speed dubbing from tape deck A to tape deck B.

㉕ **Cassette operation buttons**
((A) means tape deck A and (B), tape deck B.)
PLAY (▶) (A), (B): Press this button to play a tape.
REC (●) (B): Press this button together with the PLAY (▶) button to record.
REW (◀◀) (A), (B): Press this button to rewind a tape.
FF (▶▶) (A), (B): Press this button to fast forward a tape.
STOP/EJECT (■ ≜) (A), (B): Press to stop a tape while the tape is running. When the tape is stopped and this button is pressed, the cassette door is opened for tape loading and unloading.
PAUSE (▮▮) (B): Press to stop the tape temporarily in recording or play back. To release the pause, press again.

㉖ **VOLUME**
Use to adjust the volume of the speakers or headphones.

Note:
- **Set the volume so as not to disturb your neighbors, especially late at night.**

㉗ **REMOTE SENSOR**
This sensor detects the signals transmitted from the remote control unit.

㉘ **RECEIVED indicator**
Lights when this unit receives signals transmitted from the remote control unit.

㉙ **SOURCE SELECTOR**
TAPE: Press this button to listen to tapes.
PHONO: Press this button to listen to records.
TUNER: Press this button to listen to an AM (MW/LW)/FM broadcast.
VIDEO/AUX: Press this button to listen to the source connected to the VIDEO/AUX terminals.
CD: Press this button to listen to a connected compact disc player.

㉚ **BALANCE**
Balances the volume between the left and right speakers.

㉛ **S.E.A. graphic equalizer system**
Adjust the tone as required using these knobs.
63 Hz: Raise to emphasize the very low bass response of organs, drums and contrabass. Raising this knob produces stable and solid sound to eliminate unclear sound at low frequencies, lower the knob.
250 Hz: Lower the knob to reduce reflected sound in the listening room or to eliminate unclear sound caused in a small listening room.
1 kHz: Most effective in emphasizing or deemphasizing the human voice. Raise the knob to cause the vocalist to be brought to the foreground, or lower for the vocalist to recede into the background.
4 kHz: Raise this knob slightly so that the tension of strings can be sensed and vigorous sound can be obtained. Lower the knob for easy listening.

㉔ **Taste für High Speed-Überspielen**
Betätigen, um in erhöhter Geschwindigkeit von Cassettenteil A auf Cassettenteil B zu überspielen.

㉕ **Laufwerk-Funktionstasten**
((A) bezeichnet Cassettenteil A, (B) bezeichnet Cassettenteil B.)
PLAY (▶) (A), (B): Diese Taste für Wiedergabebetrieb betätigen.
REC (●) (B): Zusammen mit der PLAY (▶)-Taste betätigen, um auf Aufnahme zuschalten.
REW (◀◀) (A) (B): Diese Taste betätigen, um das Band rückzuspulen.
FF (▶▶) (A) (B): Diese Taste betätigen, um das Band vorzuspulen.
STOP/EJECT (■ ≜) (A) (B): Betätigen, um den Bandtransport zu stoppen. Andernfalls betätigen, um den Cassettenhalter zum Einlegen/Entnehmen einer Cassette zu öffnen.
PAUSE (▮▮) (B): Betätigen, um den Bandtransport bei Aufnahme oder Wiedergabe kurzzeitig zu unterbrechen. Zur Bandtransport-Fortsetzung diese Taste nochmals betätigen.

㉖ **Lautstärkeregler (VOLUME)**
Zum Einstellen der Lautstärke für Lautsprecher oder Kopfhörer.

Hinweis:
- **Die Lautstärke stets nur so einstellen, daß andere nicht gestört werden, insbesonders bei Nacht.**

㉗ **Fernbedienungssensor (REMOTE SENSOR)**
Dieser Sensor empfängt die von der Fernbedienungseinheit ausgestrahlten Signale.

㉘ **Sensor-Empfangsanzeige (RECEIVED)**
Leuchtet bei Empfang von Signalen der Fernbedienungseinheit.

㉙ **Signalquellentaste (SOURCE SELECTOR)**
TAPE: Zur Cassettenwiedergabe betätigen.
PHONO: Zur Schallplattenwiedergabe betätigen.
TUNER: Zum Radioempfang (FM/AM (MW/LW)) betätigen.
VIDEO/AUX: Zur Wiedergabe der an den VIDEO/AUX-Buchsen angeschlossenen Signalquelle betätigen.
CD: Zur Wiedergabe einer Compact Disk betätigen.

㉚ **Balanceregler (BALANCE)**
Für die Balanceregelung zwischen linkem und rechtem Kanal.

㉛ **S.E.A. Graphic Equalizer-System**
Mit diesen Reglern kann der Klang nach persönlichem Geschmack eingestellt werden.
63 Hz: Hochschieben, um die tiefen Frequenzen von Orgel, Schlagzeug und Kontrabass zu betonen und einen "stabileren" Klang zu erzielen. Durch Absenken des Reglers kann ein verschwommenes Klangbild der tiefen Frequenzen eliminiert werden.
250 Hz: Nach unten schieben, um Klangreflektionen im Hörraum zu reduzieren und den unklaren Klang in kleinen Hörräumen zu minimieren.
1 kHz: Besonders wirkungsvoll zur Betonung oder Abschwächung von Gesangsstimmen. Hochschieben, um Vokalisten deutlicher hervorzubringen; absenken, um Vokalisten in den Hintergrund zu setzen.
4 kHz: Leicht nach oben schieben, damit die Spannungen von Streichinstrumenten empfunden werden können und ein kraftvollerer Klang erzielt wird. Nach unten schieben, um Unterhaltungsmusik zu hören.

㉔ **Copie à grande vitesse (HIGH SPEED DUBBING)**
Appuyer sur cette touche pour la copie à grande vitesse de la platine A vers la platine B.

㉕ **Touches de fonctionnement de la cassette**
((A) signifie platine A et (B), platine B.)
PLAY (▶)(A), (B): Appuyer sur cette touche pour lire une bande.
REC (●) (B): Appuyer sur cette touche et la touche PLAY (▶) pour enregistrer.
REW (◀◀) (A), (B): Pour réembobiner la bande.
FF (▶▶) (A), (B): Pour faire défiler rapidement la bande en avant.
STOP/EJECT (■ ≜) (A), (B): Appuyer pour arrêter la bande quand elle défile. Quand la bande est arrêtée, le porte cassette s'ouvre pour la mise en place ou le retrait de la cassette.
PAUSE (▮▮) (B): Appuyer pour arrêter momentanément la bande pendant l'enregistrement ou la lecture. Pour relâcher la pause, appuyer à nouveau.

㉖ **Commande de volume (VOLUME)**
Utiliser pour régler le volume des haut-parleurs ou du casque d'écoute.

Remarque:
- **Régler le volume pour ne pas déranger les voisins, surtout tard le soir.**

㉗ **Détecteur de télécommande (REMOTE SENSOR)**
Ce détecteur reçoit les signaux transmis à partir du boîtier de télécommande.

㉘ **Indicateur de réception (RECEIVED)**
S'allume quand l'appareil reçoit des signaux transmis à partir du boîtier de télécommande.

㉙ **Sélecteur de source (SOURCE SELECTOR)**
TAPE: Appuyer pour écouter des bandes.
PHONO: Appuyer pour écouter des disques.
TUNER: Appuyer pour écouter une émissions AM (PO/GO)/FM.
VIDEO/AUX: Appuyer sur cette touche pour écouter la source raccordée aux bornes VIDEO/AUX.
CD: Appuyer sur cette touche pour écouter le lecteur de disque audionumérique raccordé.

㉚ **Commande de balance (BALANCE)**
Equilibre le volume entre les haut-parleurs de gauche et de droite.

㉛ **Système d'égaliseur graphique S.E.A.**
Régler la tonalité comme voulu en utilisant ces commandes:
63 Hz: Relever pour mettre en valeur la réponse de l'orgue, des tambours et des contrebasses. Ce bouton relevé produit un son stable et solide. Pour éliminer le son peu clair des basses fréquences, abaisser ce bouton.
250 Hz: Abaisser la commande pour réduire les réflexions sonores ou pour éliminer le son peu clair dans une petite salle d'écoute.
1 kHz: La plus efficace pour mettre en valeur ou atténuer la voix humaine. Relever la commande pour mettre la voix d'un soliste au premier plan; abaisser pour renvoyer la voix d'un soliste à l'arrière-plan.
4 kHz: Relever légèrement cette commande pour mettre en valeur les cordes et obtenir un son plus vigoureux. Abaisser la commande pour une écoute facile.

16 kHz: Boosting this frequency range properly adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing way, and provides a feeling of extension.
This knob can also be used to compensate for cartridge response since most moving magnet cartridges have resonance peaks in the frequency range from 10 kHz to 20 kHz.

⓬ **PHONES jack**
Plug in here when using headphones.

Notes:
- **Plugging in headphones switches off the sound from the speakers.**
- **Set the volume properly so that sound from the headphones does not hurt your ears.**

⓭ **SURROUND**
Press this button to WIDE (▂) with a stereo signal for an expanded sound field. Usually set this switch to NORMAL (▇).

⓮ **POWER**
ON (▂): Press this button to turn the power on.
OFF (▇): Set to this position to turn the power off.

REMOTE CONTROL UNIT (RM-SE300)

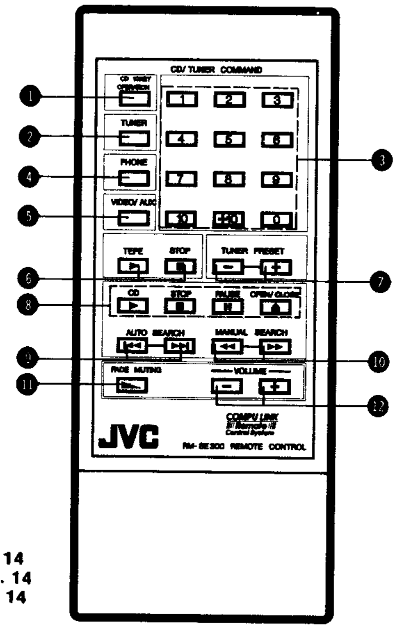


Fig. 14
Abb. 14
Afb. 14

❶ **CD 10 KEY OPERATION**
Press this button to use the CD/TUNER COMMAND keys for selecting a CD track.

❷ **TUNER**
Press this button to listen to an AM (MW/LW) or FM broadcast.

❸ **CD/TUNER COMMAND**
$\boxed{1}$ — $\boxed{10}$, $\boxed{+10}$, $\boxed{0}$: From the preset channels in which frequencies have already been stored, check the channel number corresponding to the broadcast you want to hear, and press that channel number button.

16 kHz: Die Betonung dieses Frequenzbereichs hebt hohe Frequenzen hervor, Becken, Triangel etc. klingen angenehmer. Es entsteht der Eindruck eines erweiterten Klangfeldes. Dieser Regler kann auch verwendet werden, um den Frequenzgang eines magnetischen Tonabnehmers auszugleichen, da die meisten Tonabnehmer dieses Typs zwischen 10 kHz und 20 kHz eine Resonanzspitze vorweisen.

⓬ **Kopfhörerbuchse (PHONES)**
Für den Anschluß eines Kopfhörers.

Hinweise:
- **Bei Anschluß eines Kopfhörers sind die Lautsprecher automatisch abgeschaltet.**
- **Keine übermäßige Lautstärke einstellen, da es hierdurch zu Gehörschäden kommen kann.**

⓭ **Klangfelderweiterungstaste (SUUROUND)**
Auf Position (WIDE (▂)) stellen, um das Stereosignal in einem erweiterten Klangfeld wiederzugeben. Im Normallfall auf NORMAL (▇) stellen.

⓮ **Netztaste (POWER)**
ON (▂): Zum Einschalten des Geräts betätigen.
OFF (▇): Zum Ausschalten nochmals betätigen.

FERNBEDIENUNGS-EINHEIT (RM-SE300)

❶ **Taste für CD-Titel-Direktanwahl (CD 10 KEY OPERATION)**
Betätigen, um mit den CD/TUNER COMMAND-Tasten einen Titel auf einer CD direkt anwählen zu können.

❷ **Tunertaste (TUNER)**
Betätigen, um vom Radioteil FM/AM (MW/LW)-Empfang wiederzugeben.

❸ **CD/TUNER COMMAND**
Tasten $\boxed{1}$ bis $\boxed{10}$, $\boxed{+10}$ und $\boxed{0}$: Die Speichersendertaste drücken, der die gewünschte Empfangsfrequenz zugeordnet ist.
Beispiele:
Speichersender 1 bis 10: Zum Aufruf von Speichersender 5 die Taste $\boxed{5}$ drücken. Zum Aufruf von Speichersender 10 die Taste $\boxed{10}$ drücken.
Zum Aufruf von Speichersender 17 einmal die Taste $\boxed{+10}$ und dann Taste $\boxed{7}$ drücken.

16 kHz: Une bonne amplification de cette gamme de fréquences ajoute la délicatesse des aigus, avec des cymbales et des triangles résonnant d'une façon plus plaisante pour l'oreille, et produit un effet d'extension. Cette commande peut également être utilisée pour compenser la réponse des cellules du fait que la plupart des cellules à aimant mobile ont leurs crêtes de résonance entre 10 et 20 kHz.

⓬ **Prise de casque d'écoute (PHONES)**
Brancher un casque d'écoute stéréo à cette prise.

Remarques:
- **En branchant un casque d'écoute, le son des haut-parleurs est coupé.**
- **Régler correctement le volume pour que le son du casque d'écoute ne vous abime pas les oreilles.**

⓭ **Touche SURROUND**
Presser cette touche sur WIDE (▂) avec un signal stéréo pour un champ sonore élargi. Normalement mettre ce commutateur sur NORMAL (▇).

⓮ **Alimentation (POWER)**
ON (▂): Appuyer pour mettre l'alimentation.
OFF (▇): Appuyer pour couper l'alimentation.

BOITIER DE TELECOMMANDE (RM-SE300)

❶ **CD 10 KEY OPERATION**
Appuyer sur cette touche pour utiliser les touches CD/TUNER COMMAND pour la sélection d'un morceau CD.

❷ **TUNER**
Appuyer sur cette touche pour écouter une émission AM (PO/GO) ou FM.

❸ **CD/TUNER COMMAND**
$\boxed{1}$ — $\boxed{10}$, $\boxed{+10}$, $\boxed{0}$: A partir des canaux préréglés dans lesquels des fréquences ont déjà été stockéees, pour vérifier le numéro de canal correspondant à l'émission que vous voulez écouter, appuyer sur la touche de numéro de canal.
Exemples:
Canaux 1 à 10: Pour le canal 5, appuyer sur la touche $\boxed{5}$. Pour le canal 10, appuyer sur la touche $\boxed{10}$.
Canal 17: Appuyer une fois sur la touche $\boxed{+10}$ et puis sur la touche $\boxed{7}$.

Examples:
Channels 1 — 10: For Channel 5, press button [5]. For Channel 10, press button [10].
Channel 17: Press [+10] button once and then button [7].
Channel 20: Press [+10] button once and then button [10].
Channel 25: Press [+10] button twice and then button [5].

Note:
- **For operations of the CD player, refer to the instruction book provided with the CD player.**

❹ **PHONO**
Press this button to listen to a record.

❺ **VIDEO/AUX**
Press this button to listen to the source connected to the VIDEO/AUX terminals.

❻ **TAPE [▶]**
Press this button to listen to tape; the souce selector is automatically switched to the tape mode and, the tape deck is in the tape remote standby mode, the tape will start automatically.
STOP [■]
Pressing this button during playback or recording stops the tape (the deck enters the tape remote standby mode). To restart tape play or recording, press the [▶] button.

Notes:
- **When the tape is stopped with the STOP [■] button on the remote control unit, the other cassette mechanism cannot be used for fast-forwarding or rewinding. To make the cassette mechanism operable, press the [▶] button on the remote control unit or press the STOP/EJECT (■ ≜) button on the front panel.**
- **After playing a tape, press the STOP/EJECT (■ ≜) button on the front panel to release the tape standby function.**
- **Do not set the POWER button of the DR-E300BK/LBK to OFF when tape has been stopped using the remote control unit (tape remote standby mode). Before turning off the power of this unit, be sure to press the STOP/EJECT (■ ≜) button on the front panel.**

❼ **TUNER PRESET ⊟, ⊞ button**
Scan the preset FM/AM stations in order.

❽ **CD [▶]**: Press this button to play a compact disc.
STOP [■]: Press this button to stop play.
PAUSE [II] : Press to suspend play temporarily.
OPEN/CLOSE [≜] : Press to move the disc tray in and out.

Note:
- **When operating the CD player with the remote control unit, be sure to connect the remote cable (provided) between the CDplayer and this unit.**

❾ **AUTO SEARCH**
[⏮] (backward)
Press once during play to return the pickup to the start of the current tune. Press again to return the pickup to the start of the previous tune. Each time it is pressed, the pickup moves backward by one tune. If the button is held down, play will continue to go back one selection at a time until the button is released.

Zum Aufruf von Speichersender 20 einmal die Taste [+10] und dann Taste [10] drücken.
Zum Aufruf von Speichersender 25 zweimal die Taste [+10] und dann Taste [5] drücken.

Hinweis:
- **Angaben zur Handhabung des CD-Players finden Sie in dessen Bedienungsanleitung**

❹ **Phonotaste (PHONO)**
Betätigen, um Schallplattenwiedergabe durchzuführen.

❺ **Video/AUX-Taste (VIDEO/AUX)**
Betätigen, um von der an den VIDEO/AUX-Buchsen angeschlossenen Signalquelle wiederzugeben.

❻ **Taste TAPE [▶]**
Betätigen, um auf Bandwiedergabe zu schalten. Der Signalquellenwähler wird automatisch auf Signalquelle "Bandgerät" geschaltet. Das Bandgerät ist auf Fernbedien-Betriebsbereitschaft geschaltet und startet automatisch die Wiedergabe.
Taste STOP [■]
Mit dieser Taste wird das Laufwerk bei Wiedergabe oder Aufnahme abgeschaltet (Das Bandgerät schaltet auf Fernbedien-Betriebsbereitschaft). Zur Fortsetzung von Wiedergabe oder Aufnahme die [▶] -Taste erneut drücken.

Hinweise:
- **Wird der Bandtransport durch Drücken der Taste STOP [■] der Fernbedienung gestoppt. so ist Schnellvorlauf und Rückspulen mit dem anderen Laufwerk nicht möglich. Zur Aktivierung dieser Funktionen sind die [▶] -Taste der Fernbedienung oder die Taste STOP/EJECT (■ ≜) auf der Frontkonsole zu drücken.**
- **Nach dem Abspielen eines Bands die Taste STOP/EJECT (■ ≜) an der Frontplatte drücken, um die Bereitschaftsfunktion freizugeben.**
- **Wenn der Bandlauf über die Fernbedienung gestoppt wurde, den DR-E300BK/LBK nicht mit der POWER-Taste abschalten (Fernbedien-Betriebsbereitschaft). Vor Abschalltung des Geräts unbedingt erst die STOP/EJECT-Taste (■ ≜) an der Frontblende betätigen.**

❼ **TUNER PRESET-Taste (⊟, ⊞)**
Die gespeicherten FM/AM-Sender in Eingabereihenfolge abrufen.

❽ **CD [▶]**: Betätigen, um auf CD-Wiedergabe zu schalten.
STOP [■]: Betätigen um die Wiedergabe zu stoppen.
PAUSE [II] : Zur zeitweiligen Wiedergabeunterbrechung betätigen.
OPEN/CLOSE [≜] : Zum Öffnen und Schließen des CD-Halters betätigen.

Hinweis:
- **Bei Verwendung der Fernbedienungseinheit für den CD-Player unbedingt das mitgelieferte Fernbedienkabel zwischen CD-Player und diesem Gerät anschließen.**

❾ **Auto-Suchlauf-Tasten (AUTO SEARCH)**
[⏮] (rückwärts)
Bei Wiedergabe einmal betätigen, um den Abtaster bis zu Anfand des vorliegenden Titels zurückzusetzen. Nochmals betätigen, um bis zum Beginn des vorhergehenden Titels zu versetzen. Mit jeder weiterer Betätigung wird der Abtaster um einen Titel zurückversetzt. Bei gedrückt gehaltener Taste erfolgt die Zurücksetzung kontinuierlich bis zur Freigabe der Taste.

Canal 20: Appuyer sur fois sur la touche [+10] et puis sur la touche [10].
Canal 25: Appuyer deux fois sur la touche [+10] et puis sur la touche [5].

Remarque:
- **Pour le fonctionnement du lecteur de disque audionumérique, se reporter au manuel d'instructions fourni avec le lecteur de disque audionumérique.**

❹ **PHONO**
Appuyer sur cette touche pour écouter un disque.

❺ **VIDEO/AUX**
Appuyer sur cette touche pour écouter la source raccordée aux bornes VIDEO/AUX.

❻ **TAPE [▶]**
Appuyer sur cette touche pour écouter la bande; le sélecteur de source est commuté automatiquement sur le mode bande et, la platine à cassette est dans le mode d'attente de télécommande de bande, la bande avancera automatiquement.
STOP [■]
Une pression sur cette touche pendant la lecture ou l'enregistrement arrête la bande (la platine passe en mode d'attente de télécommande de bande). Pour reprendre la lecture ou l'enregistrement, appuyer sur cette touche [▶].

Remarques:
- **Si la bande est arrêtée avec la touche STOP [■] du boîtier de télécommande, l'autre mécanisme de cassette ne peut pas être utilisé pour l'avance rapide ou le réembobinage. Pour rendre le mécanisme de cassette commandable, appuyer sur la touche [▶] du boîtier de télécommande ou appuyer sur la touche STOP/EJECT (■ ≜) sur le panneau avant.**
- **Après lecture d'une bande, appuyer sur la touche STOP/EJECT (■ ≜) sur le panneau avant pour libérer la fonction d'attente de bande.**
- **Ne pas mettre la touche POWER de la DR-E300BK/LBK sur OFF quand la bande a été arrêtée en utilisant le boîtier de télécommande (mode d'attente de télécommande de bande). Avant de couper l'alimentation de cet appareil, s'assurer de bien appuyer sur la touche STOP/EJECT (■ ≜) sur le panneau avant.**

❼ **Touche TUNER PRESET (⊟, ⊞)**
Balaie les stations FM/AM préréglées dans l'ordre.

❽ **CD [▶]**: Appuyer sur cette touche pour lire un disque audionumérique.
STOP [■] : Appuyer sur cette touche pour arrêter la lecture.
PAUSE [II] : Appuyer pour arrêter momentanément la lecture.
OPEN/CLOSE [≜] : Appuyer pour ouvrir ou fermer le tiroir du disque.

Remarque:
- **Pour faire fonctionner le lecteur de disque audionumérique avec le boîtier de télécommande, s'assurer de bien raccorder le fil de télécommande (fourni) entre le lecteur de disque audionumérique et cet appareil.**

❾ **Recherche automatique (AUTO SEARCH)**
[⏮] (en arrière)
Appuyer une fois sur cette touche pendant la lecture pour revenir au début du morceau courant. Appuyer à nouveau pour revenir au début du morceau précédent. Chaque pression sur cette touche fait déplacer le capteur d'un morceau en arrière. Si la touche est maintenue pressée, la lecture continuera à sauter en arrière d'une sélection à la fois jusqu'au relâchement de la touche.

▶▶| (forward)
Press once during play to move the pickup to the start of the next tune. Each time it is pressed, the pickup moves forward by one tune. If the button is held down play will continue to go forward one selection at a time until the button is released.

⑩ **MANUAL SEARCH**
◀◀ (backward)
Press to search for the required tune by moving the pickup back.
▶▶ (forward)
Press to search for the required tune by moving the pickup forward; sound can be heard at reduced volume level while search is taking place in the play mode.

⑪ **FADE MUTING (▥)**
Press this button to lower the volume in steps. The volume is further decreased each time this button is pressed.

⑫ **VOLUME ⊟ / ⊞**
Press these buttons to change the volume.
To raise the volume, press the ⊞ button. To decrease it, press the ⊟ button.
The volume indicator flickers.

▶▶| (vorwärts)
Bei Wiedergabe einmal betätigen, um den Abtaster bis zum Beginn des nchfolgenden Titels zu versetzen. Mit jeder weiterer Betätigung wird der Abtaster um einen Titel vorwärts versetzt. Bei gedrückt gehaltener Taste erfolgt die Vorsetzung kontinuierlich bis zur Freigabe der Taste.

⑩ **Manueller Suchlauf (MANUAL SEARCH)**
◀◀ (rückwärts)
Betätigen, um den Abtaster bis zum gewünschten Titel zurückzusetzen.
▶▶ (vorwärts)
Betätigen, um den Abtaster zum gewünschten Titel vorzusetzen. Die Lautstärke ist beim Suchlauf während Wiedergabe abgesenkt.

⑪ **Ausblendtaste (FADE MUTING) (▥)**
Die Lautstärke kann in Einzelschritten reduziert werden. Mit jedem Betätigen wird die Lautstärke um eine Stufe reduziert.

⑫ **Lautstärketaste (VOLUME ⊟ / ⊞)**
Für die Lautstärkeeinstellung betätigen. Taste ⊞ für Lautstärkeanhebung. Taste ⊟ für Lautstärkeabsendung verwenden.
Die Lautstärkeanzeige blinkt.

▶▶| (en avant)
Appuyer une fois pendant la lecture pour passer au début du morceau suivant. Chaque pression sur cette touche fait déplacer le capteur d'un morceau en avant. Si la touche est maintenue pressée, la lecture continuera à sauter en avant d'une sélection à la fois jusqu'au relâchement de la touche.

⑩ **Recherche manuelle (MANUAL SEARCH)**
◀◀ (en arrière)
Appuyer sur cette touche pour rechercher le morceau voulu en déplaçant le capteur en arrière.
▶▶ (en avant)
Appuyer sur cette touche pour rechercher le morceau voulu en déplaçant le capteur vers l'avant; le son peut être entendu à niveau sonore réduit alors que la recherche a lieu en mode de lecture.

⑪ **Silencieux en fondu (FADE MUTING) (▥)**
Appuyer sur cette touche pour faire baisser le volume par paliers. Le volume diminue à chaque pression sur la touche.

⑫ **VOLUME ⊟ / ⊞**
Appuyer sur ces touches pour changer le volume. Pour augmenter le volume, appuyer sur la touche ⊞ . Pour le diminuer, appuyer sur la touche ⊟ .
L'indicateur de volume clignote.

How to use the remote control unit

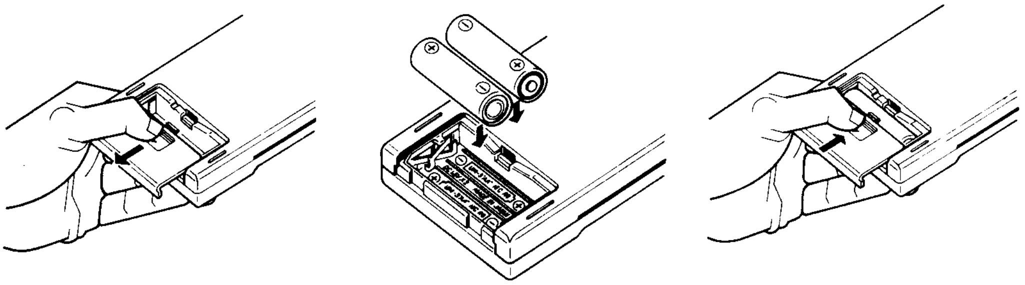


Fig. 15
Abb. 15
Afb. 15

- **How to install batteries**

1. Remove the cover on the rear of the remote control unit.
2. Install the two provided UM-3 (AA, R6) batteries with their polarities properly placed as shown in the figure.
3. Re-install the cover.

- **How to use**

Operate the remote control unit (RM-SE300) deliberately and with care, while it is pointed toward the REMOTE SENSOR section on the main unit. It may be used from as far away as 23 feet (7 m). To maximize its usable distance, operate the remote control directly in front of the REMOTE SENSOR section.

- **How to use the batteries**

Improper use of the batteries can cause leakage or damage. So, take the following precautions:

1. Install batteries with their polarities properly placed.
2. Do not mix new and used batteries.
3. Use the same brand and type of batteries because otherwise the voltages may differ slightly.
4. If the remote control unit will not be used for a long time, remove the batteries.
Also, follow the instructions on the batteries.

Handhabung der Fernbedienungseinheit

- **Einlegen der Batterien**

1. Den Batteriefachdeckel an der Geräteunterseite abnehmen.
2. Die beiden mitgelieferten UM-3 (AA, R6)-Batterien unter Beachtung der Polarität wie in der Abbildung gezeigt einlegen.
3. Den Fachdeckel wieder anbringen.

- **Verwendung der Fernbedienungseinheit**

Fernbedienungseinheit (RM-SE300) vorsichtig handhaben. Zur Funktionsauslösung auf den REMOTE SENSOR-Bereich an der Hauptkomponente richten. Der Wirkungsbereich beträgt bis zu 7 m vom Empfangssensor. Zur Erhöhung der Reichweite möglichst in rechtem Winkel zum REMOTE SENSOR-Bereich operieren.

- **Sicherheitshinweise zum Batteriegebrauch**

Unsachgemäße Handhabung und Verwendung der Batterien können zu Auslaufen und zu Schäden führen. Die folgenden Punkte beachten:

1. Die Batterien mit korrekter Polarität einlegen.
2. Niemals frische und gebrauchte Batterien zusammen verwenden.
3. Stets die gleiche Marke und den gleichen Typ zusammen verwenden. Andernfalls können unterschiedliche Spannungen vorliegen.
4. Bei längerem Nichtgebrauch der Fernbedienungseinheit die Batterien entnehmen.
Auch die auf den Batterien aufgedruckten Hinweise beachten.

Utilisation du boîtier de télécommande

- **Mise en place des piles**

1. Retirer le couvercle à l'arrière du boîtier de télécommande.
2. Installer les deux piles fournies UM-3 (AA, R6) en respectant les polarités comme montré sur la figure.
3. Replacer le couvercle.

- **Utilisation**

Faire fonctionner le boîtier de télécommande (RM-SE300) posément et avec attention en le pointant vers la section REMOTE SENSOR de l'appareil principal. Il peut être utilisé jusqu'à 7 m. Pour augmenter la distance utilisable, faire fonctionner la télécommande directement en face de la section REMOTE SENSOR.

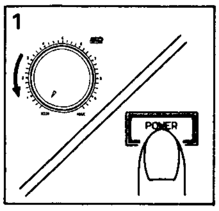
- **Utilisation des piles**

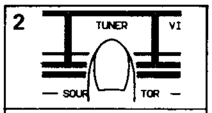
L'utilisation incorrecte des piles peut produire des coulages ou des dommages. Par conséquent, prendre les précautions suivantes:

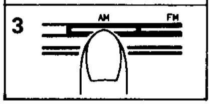
1. Installer les piles avec leurs polarités correctement placées.
2. Ne pas mélanger des piles neuves avec des vieilles.
3. Utiliser la même marque et le même type de piles car sinon les tensions peuvent varier légèrement.
4. Si le boîtier de télécommande ne sera pas utilisé pendant une longue période, retirer les piles.
Suivre également les instructions marquées sur les piles.

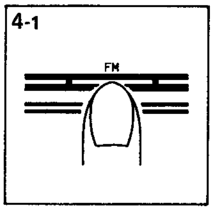
OPERATION

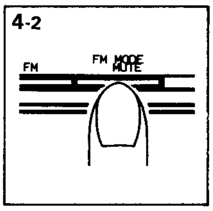
LISTENING TO BROADCASTS, RECORDS, CD OR VIDEO/AUX

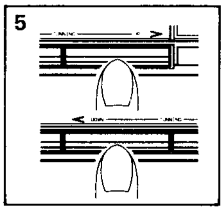


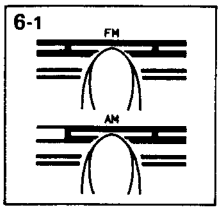












1. Press the POWER button to ON (▬) after setting the volume knob to minimum.
2. **To listen to broadcasts**
   Press the TUNER button.
3. To listen to an AM (MW/LW) broadcast, press the AM (MW/LW) button.

4-1. To listen to an FM broadcast, press the FM button.
4-2. Press the FM MODE/MUTE button to AUTO/ON.

Note:

- **In weak signal areas, set the FM MODE/MUTE button to MONO/OFF. FM broadcasts will be heard in mono but noise is reduced.**
- **Depending on the broadcast being received, the CD player may cause interference if on. If this happens, turn the CD player's power off.**

5. Tune in a broadcast with the UP/DOWN TUNING button.
   In areas where signals are optimum, the TUNING indicator lights, when an FM or AM (MW/LW) broadcast is received. If it is an FM stereo broadcast, the FM STEREO indicator lights.

Presetting to selected stations (FM or AM)

There are two ways to preset stations using the TUNING buttons (A) Auto tuning/manual tuning, (B) Auto memory function.

(A) Auto tuning/manual tuning

6-1. Press the FM or AM button.
6-2. Tune to a desired station by pressing the TUNING UP or DOWN button (for auto tuning) or by tapping it (for manual tuning).
6-3. Press the MEMORY button so that the MEMORY indicator lights.
6-4. Press one of the 10 KEY numeric keys.
6-5. Perform the same pre-tuning procedure (steps 2, 3, 4) for any other channels. Pre-tuning is possible for up to 40 stations (for FM and AM).

(B) How to operate the auto memory function

(Refer to ⓫ AUTO MEMORY button on page 13.)

7-1. Press the FM or AM button.
7-2. Tune to the frequency from which you wish the AUTO MEMORY function to start scanning.

BEDIENUNG

WIEDERGABE VON RADIOSENDUNGEN, SCHALLPLATTEN, CD ODER VIDEO/AUX

1. Den Lautstärkeregler auf Minimum stellen und dann den POWER-Schalter auf ON (▬) drücken.
2. **Zum Hören einer Sendung**
   Die TUNER-Taste betätigen.
3. Zum Hören eines MW/LW-Senders den AM (MW/LW)-Schalter drücken.

4-1. Zum Hören eines UKW-Senders den FM-Schalter drücken.
4-2. Den FM MODE/MUTE-Schalter auf AUTO/ON drücken.

Hinweis:

- **In Gebieten mit schwachen Sendersignalen den FM MODE/MUTE-Schalter auf MONO/OFF stellen. Die UKW-Sender werden dann in Mono gehört, aber die Störgeräusche sind reduziert.**
- **Je nach Art des Sendeempfangs kann der CD-Player Interferenzstörungen verursachen. In diesem Fall den CD-Player abschalten.**

5. Mit dem UP/DOWN TUNING-Regler einen Sender einstellen.
   In Gebieten mit guten Empfangsbedingungen leuchtet die TUNING-Anzeige, wenn ein UKW- oder MW/LW-Sender empfangen wird. Wenn ein UKW-Stereosender empfangen wird, leuchtet die FM STEREO-Anzeige.

Belegung der Stationstasten

Es gibt zwei Möglichkeiten, Sender mit den TUNING-Tasten zu speichern (A) Automatische Abstimmung/manuelle Abstimmung, (B) Auto-Speicherfunktion.

(A) Automatische Abstimmung/manuelle Abstimmung

6-1. Die FM- oder AM-Taste drücken.
6-2. Die TUNING-Taste für automatische Abstimmung drücken oder für manuelle Abstimmung antippen, um den gewünschten Sender einzustellen.
6-3. Die MEMORY-Taste drücken, so daß die MEMORY-Anzeige leuchtet.
6-4. Eine der numerischen Tasten drücken.
6-5. Die gleiche Bedienung (Schritte 2, 3, 4) für die verbleibenden Kanäle durchführen. Bis zu 40 Sender (für UKW- und MW-Sender) können gespechert werden.

(B) Bedienung der Auto-Speicherfunktion

(Siehe ⓫ AUTO MEMORY-Taste auf Seite 13.)

7-1. Die FM- oder AM-Taste drücken.
7-2. Auf die Frequenz einstellen, von der aus die AUTO MEMORY-Funktion mit dem Absuchen beginnen soll.

FONCTIONNEMENT

ECOUTE D'EMISSIONS, DE DISQUES, DE DISQUES AUDIONUMERIQUES OU DE VIDEO/AUX

1. Enfoncer l'interrupteur POWER sur ON (▬) après avoir placé la commande de volume au minimum.
2. **Pour écouter une émission**
   Appuyer sur la touche TUNER.
3. Pour écouter une émission AM (PO/GO), enfoncer le commutateur AM (PO/GO).

4-1. Pour écouter une émission FM, enfoncer le commutateur FM.
4-2. Enfoncer le commutateur FM MODE/MUTE sur AUTO/ON.

Remarque:

- **Dans les régions où les signaux sont faibles, enfoncer le commutateur FM MODE/MUTE sur MONO/OFF. Les émissions FM seront audibles en mono mais le bruit sera réduit.**
- **En fonction de l'émission reçue, le lecteur de disque audionumérique peut causer des interférences en étant en marche. Si cela arrive, couper l'alimentation du lecteur.**

5. Syntoniser sur la station avec la commande UP/DOWN TUNING.
   Dans les régions où les signaux sont optima, l'indicateur TUNING s'allume quand une émission FM ou AM (PO/GO) est reçue.
   Si c'est une émission FM stéréo, l'indicateur FM STEREO s'allume.

Préréglage de stations sélectionnées

Il y a deux façons de prérégler les stations en utilisant les touches TUNING (A). Syntonisation automatique/syntonisation manuelle, (B). Fonction de mémoire automatique.

(A) Syntonisation automatique/syntonisation manuelle

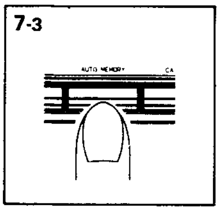
6-1. Appuyer sur la touche FM ou AM.
6-2. Syntoniser sur la station voulue en appuyant sur la touche TUNING UP ou DOWN (pour la syntonisation automatique) ou en la rentrant (pour la syntonisation manuelle).
6-3. Appuyer sur la touche MEMORY pour que l'indicateur MEMORY s'allume.
6-4. Appuyer sur une des 10 touches numériques (10 KEY).
6-5. Effectuer la même procédure de présyntonisation (étapes 2, 3, 4) pour les autres canaux. La présyntonisation est possible pour justu'à 40 stations (pour FM et AM).

(B) Fonctionnement de la fonction de mémoire automatique

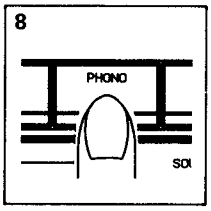
(Se reporter à ⓫ Touche de mémoire automatique (AUTO MEMORY à la page 13.)

7-1. Appuyer sur la touche FM ou AM.
7-2. Syntoniser sur la fréquence à partir de laquelle vous voulez que la fonction AUTO MEMORY commence le balayage.

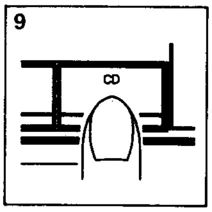
7-3



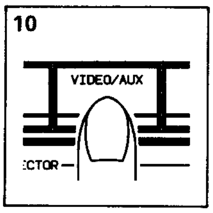
8



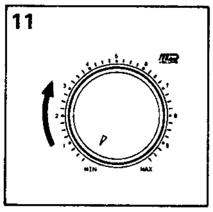
9



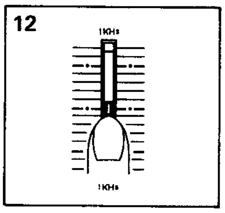
10



11



12



7-3. Press the AUTO MEMORY button and one of the preset channel 10 KEY buttons. The AUTO MEMORY indicator lights and auto scanning starts from the displayed frequency towards higher frequencies. When a broadcast is received, the TUNED indicator lights and the selected station number flashes. If you do not press the AUTO MEMORY button again, the MEMORY indicator and the channel number light together and the frequency is stored in memory. This continues until the preset channel with the hightest number has a frequency in its memory or auto scanning reaches the highest frequency.

Note:

- **The broadcast received before the power is shut off will again be received when the power is reapplied because the memory circuit functions retain preset stations. This memory is held for about one week in normal conditions, but may be erased after exceeding this period. In this case, preset stations again.**

8. **Listening to a record.**
   Press the PHONO button.
   Operate the turntable.
   Concerning the operation of the turntable, read its instruction book.
9. **Listening to a Compact Disc.**
   Press the CD button.
   Concerning the operation of the CD player, read its instruction book.
10. **When listening to a source connected to VIDEO/AUX**
    Press the VIDEO/AUX button.
11. Set the volume knob to the desired level.
12. Adjust the SEA knobs to obtain the tone required.

7-3. Die AUTO MEMORY-Taste und eine numerische Taste (10 KEY) drücken. Die AUTO MEMORY-Anzeige leuchtet, und das automatische Absuchen in Aufwärtsrichtung beginnt bei der angezeigten Frequenz.
Wenn ein Radiosender eingestellt ist, leuchtet die TUNED-Anzeige, und die gewählte Sendernummer blinkt. Wird die AUTO MEMORY-Taste nicht gedrückt, leuchtetn die MEMORY-Anzeige und diese Kanalnummer gemeinsam, und die Frequenz wird gespeichert. Dies wird solange fortgesetzt, bis die höchste Kanalnummer der Stationstasten eine Frequenz gespeichert hat bzw. die Automatikabtastung die höchste Frequenz erreicht.

Hinweis:

- **Der bei Geräteabschaltung eingestellte Sender ist bei Wiedereinschaltung erneut verfügbar, da ein Speicher diese Einstellung beibehält. Unter normalen Betriebsbedingungen wird diese Speicherung für ca. eine Woche beibehalten, über diesen Zeitraum hinaus erfolgt Löschung. In diesem Fall die Sender erneut speichern.**

8. **Zum Hören von Schallplatten.**
   PHONO-Schalter drücken.
   Den Plattenspieler wie erforderlich bedienen. Siehe die Bedienungsanleitung des Plattenspielers.
9. **CD-Wiedergabe.**
   Die CD-Tasten drücken.
   Die Bedienung des CD-Spielers ist in der zugehörigen Bedienungsanleitung beschrieben.
10. **Wiedergabe einer am VIDEO/AUX-Eingang angeschlossenen Signalquelle**
    Die VIDEO/AUX-Schalter drücken.
11. Die Lautstärke wie gewünscht einstellen.
12. Den Klang mit den SEA-Reglern einstellen.

7-3. Appuyer sur la touche AUTO MEMORY et une des touches numériques de canal préréglé (10 KEY). L'Indicateur AUTO MEMORY s'allume et le balayage automatique commence à partir de la fréquence affichée vers des fréquences plus élevées.
Quand une émission est reçue, l'indicateur TUNED s'allume et le numéro de station sélectionnée clignote. Si vous n'appuyez pas à nouveau sur la touche AUTO MEMORY, l'indicateur MEMORY et le numéro de canal s'allument ensemble et la fréquence est mise en mémoire. Ceci continue jusqu'à ce que le canal de numéro le plus élevé ait une fréquence en mémoire ou que le balayage automatique ait atteint la fréquence la plus élevée.

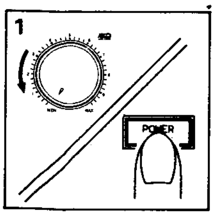
Remarque:

- **L'émission reçue avant de couper l'alimentation sera à nouveau reçue quand l'alimentation sera remise car les fonctions du circuit mémoire maintiennent les stations préréglées. Cette mémoire est maintenue pendant environ une semaine dans des conditions normales, mais elle peut être effacée après avoir dépassé cette période. Dans ce cas, prérégler à nouveau les stations.**

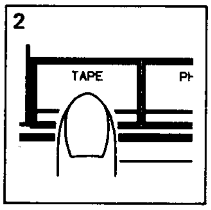
8. **Pour écouter un disque.**
   Enfoncer l'interrupteur PHONO.
   Faire fonctionner la platine tourne-disque. En ce qui concerne le fonctionnement, voir son manuel d'instructions.
9. **Ecoute d'un disque audionumérique**
   Appuyer sur la touche CD.
   Pour le fonctionnement du lecteur de disque audionuméerique, lire son manuel d'instructions.
10. **Ecoutez d'une source raccordéee à VIDEO/AUX**
    Enfoncer le commutateur VIDEO/AUX.
11. Régler la commande de volume à votre convenance.
12. Régler les commandes S.E.A. pour obtenir la tonalité voulue.

LISTENING TO TAPES

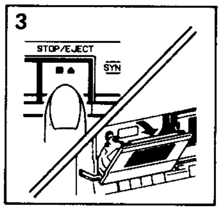
1



2



3



1. Press the POWER button to ON (▬) after setting the volume knob to minimum.
2. Press the TAPE button.

Preparation for playing back a tape

3. Either tape deck A or B can be used for playback. Press the STOP/EJECT (■ ≜) button of the tape deck selected to open the cassette door.

BANDWIEDERGABE

1. Den Lautstärkeregler auf Minimum stellen und dann den POWER-Schalter auf ON (▬) drücken.
2. Die TAPE-Taste drücken.

Wiedergabe einer Cassette

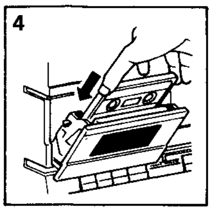
3. Für Wiedergabe kann Deck A oder Deck B verwendet werden. Die STOP/EJECT (■ ≜)-Taste dieses Decks drücken, um das Cassettenfach zu öffnen.

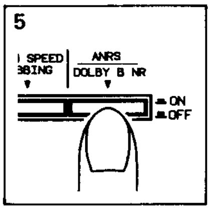
ECOUTE DE BANDES

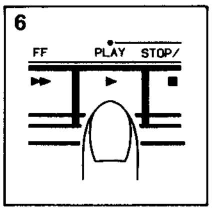
1. Enfoncer l'interrupteur POWER sur ON (▬) après avoir placé la commande de volume au minimum.
2. Enfoncer la touche TAPE.

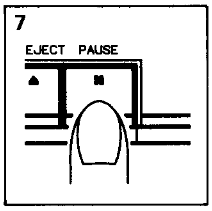
Préparatifs pour lire une bande

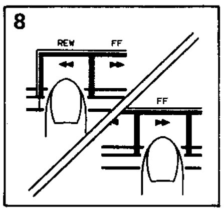
3. La platine A ou B peut être utilisée pour la lecture. Enfoncer la touche STOP/EJECT (■ ≜) de la platine sélectionnée pour ouvrir le compartiment cassette.

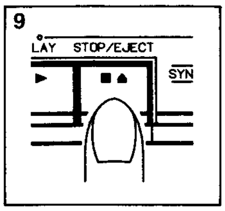
4


5


6


7


8


9


4. Insert cassettes.
5. If a tape recorded with ANRS or DOLBY B Noise Reduction System is used, press the ANRS/ DOLBY B NR button to ON (▬).
   If not, set this button to OFF (▮).
   The selection of metal or normal tape is automatic for tape deck A and B.

When playing back a tape

6. Press the PLAY (▶) button.

Note:

- **It is not possible to play tape decks A and B at the same time. If you set both decks to the play mode, only tape deck A's sound is heard.**

When interrupting tape play temporarily (tape deck B)

7. Press the PAUSE (❚❚) button. To release this function, press it again.

When fast forwarding or rewinding a tape

8. To fast forward a tape, press the FF (▶▶) button and to rewind a tape, press the REW (◀◀) button.

Note:

- **When the tape reaches its end, press the STOP/ EJECT (■ ⏏) button.**

Stopping a tape

9. Press the STOP/EJECT (■ ⏏) button.

4. Cassetten einlegen.
5. Wenn eine Cassette verwendet wird, die mit ANRS oder DOLBY B Rauschunterdrückung aufgenommen wurde, den ANRS/DOLBY B NR-Schalter auf ON (▬) drücken.
   Für Cassetten ohne Rauschunterdrückung diesen Schalter auf OFF (▮) stellen.
   Die Wahl für Metall- oder Normalband erfolgt für Deck A und B automatisch.

Wiedergabe einer Seite

6. Die PLAY (▶)-Taste betätigen.

Hinweis:

- **Deck A und Deck B können nicht gleichzeitig für Wiedergabebetrieb verwendet werden. Sind beide Decks auf Wiedergabe geschaltet, ist nur der Ton von Deck A verfügbar.**

Unterbrechung der Wiedergabe (Deck B)

7. Die PAUSE-Taste (❚❚) drücken. Zum Fortsetzen der Wiedergabe die Taste noch einmal drücken.

Schnellvorspulen oder Zurückspulen

8. Zum Schnellvorspulen die FF-Taste (▶▶) und zum Zurückspulen die REW-Taste (◀◀) drücken.

Hinweis:

- **Bei Erreichen des Bandendes die STOP/EJECT (■ ⏏)-Taste betätigen.**

Stoppen des Bandes

9. Die STOP/EJECT (■ ⏏)-Taste drücken.

4. Insérer les cassettes.
5. Si une bande enregistrée avec le système de réduction du bruit ANRS ou DOLBY B est utilisée, enfoncer le commutateur ANRS/DOLBY B NR sur ON (▬); Dans le cas contraire, placer ce commutateur sur OFF (▮).
   Du fait que la sélection de bande métal ou normale est automatique pour la platine A et B.

Pour lire une bande seulement

6. Enfoncer la touche PLAY (▶).

Remarque:

- **Il n'est pas possible de lire la bande des platines A et B en même temps. Si vous mettez les deux platines en mode de lecture, seul le son de la platine A sera entendu.**

Pour interrompre momentanément la lecture (platine B)

7. Enfoncer la touche PAUSE (❚❚). Pour relâcher cette fonction, la réenfoncer.

Pour avancer rapidement ou réembobiner la bande

8. Pour avancer rapidement la bande, enfoncer la touche FF (▶▶) et pour la réembobiner, la touche REW (◀◀)

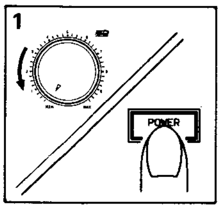
Remarque:

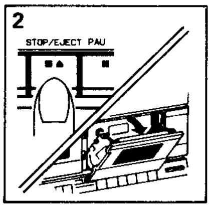
- **Lorsque la bande atteint sa fin, enfoncer la touche STOP/EJECT (■ ⏏).**

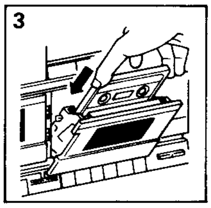
Pour arrêter la bande

9. Enfoncer la touche STOP/EJECT (■ ⏏)

RECORDING

1


2


3


Use tape deck B for recording. It is not necessary to adjust the recording level because an auto level control circuit is built into this unit. When SEA recording is not performed, set the SEA knobs to "0".

1. Press the POWER button to ON (▬) after setting the volume knob to minimum beforehand.
2. Press STOP/EJECT (■ ⏏) button to open the cassette door. If the tape is running, press the STOP/EJECT (■ ⏏) button to stop the tape and press STOP/EJECT (■ ⏏) to open the cassette door.
3. Insert a cassette.

AUFNAHME

Für Aufnahme Deck B verwenden. Der Aufnahmepegel braucht nicht manuell geregelt werden, da dieses Gerät über eine automatische Aufnahmeaussteuerung verfügt. Wenn SEA-Aufnahme nicht erforderlich ist, die SEA-Regler auf "0" stellen.

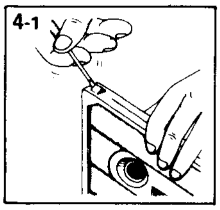
1. Nach Rückstellung des Lautstärkereglers auf seine Minimalposition, die POWER-Taste auf ON (▬) stellen.
2. Zum Öffnen des Cassettenhalters STOP/EJECT (■ ⏏) drücken. Bei laufendem Band zuerst die STOP/EJECT (■ ⏏) Taste betätigen, dann STOP/EJECT (■ ⏏) drücken.
3. Eine Cassette einlegen.

ENREGISTREMENT

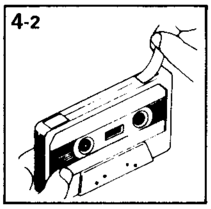
Utiliser la platine B pour l'enregistremet. Il n'est pas nécessaire de régler le niveau d'enregistrement parce qu'un circuit de commande de niveau automatique est incorporé dans cet appareil.
Si vous n'effectuez pas d'enregistrement SEA, mettre le bouton SEA sur "0".

1. Appuyer sur la touche POWER sur ON (▬) après avoir réglé le bouton de volume sur le minimum.
2. Appuyer sur STOP/EJECT (■ ⏏) pour ouvrir le compartiment cassette. Si la bande défile, appuyer sur la touche STOP/EJECT (■ ⏏) pour arrêter la bande et appuyer sur STOP/ EJECT (■ ⏏) pour ouvrir le compartiment cassette.
3. Introduire une cassette.

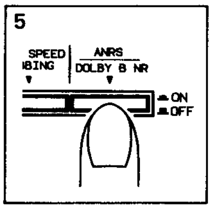
4-1



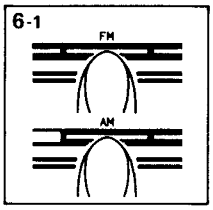
4-2



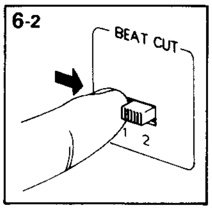
5



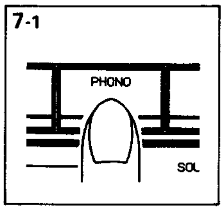
6-1



6-2



7-1



4-1. Cassettes are provided with protective tabs. After recording, break the left tab with side A toward you when side A is required to be protected, for side B, break the left tab with side B toward you.
This avoids accidental erasure.
When a tape with its tabs broken is used, it is impossible to record on it.

4-2. When a cassette with its tabs broken off is to be used for recording, seal the holes with adhesive tape.

Notes: .

- **Metal and normal tapes are automatically switched.**
- **Using a CrO_2 or Ferri-chrome tape is not recommended because this unit does not have the required characteristics.**

5. To record with ANRS or DOLBY B Noise Reduction, set the ANRS/DOLBY B NR button to ON (▬).

When recording a broadcast

6-1. Choose the desired broadcast.
For an FM broadcast, press the FM button.
For an AM broadcast, press the AM (MW/LW) button.
Concerning the method of tuning the broadcast, follow steps 3 — 6 of "LISTENING TO BROADCASTS, RECORDS, CD OR VIDEO/AUX" on page 27.

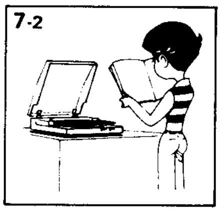
6-2. When recording an AM (MW/LW) broadcast, beats may occur.
Set the BEAT CUT knob located on the rear panel to "1" or "2" so that beats are eliminated.

When recording a record

7-1. Press the PHONO button.

7-2. Operate the turntable.
Concerning the operation of the turntable, refer to its instruction book.

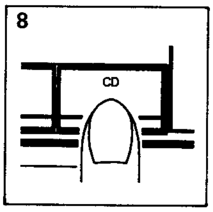
7-2



When recording from a Compact Disc

8. Press the CD button.
Concerning the operation of the CD player, refer to its instruction book.

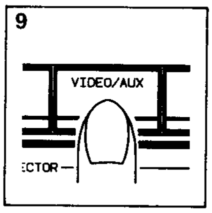
8



When recording a source from the unit connected to the VIDEO/AUX

9. Press the VIDEO/AUX button and play the unit.

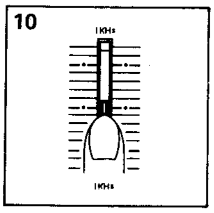
9



When performing SEA recording

10. Adjust the SEA knobs as required.

10

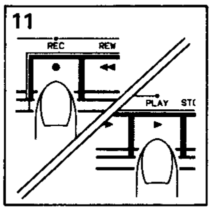


Operation of tape deck B for recording

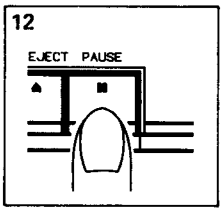
11. While holding the REC (●) button down, press the PLAY (▶) button.

12. To cut an unwanted part, press the PAUSE (❚❚) button; the pause mode is set and the recording is interrupted. To restart the recording, press the PAUSE (❚❚) button.

11



12



Notes:

- **Do not press the HIGH SPEED DUBBING button during recording.**

- **If a second tape deck is operated while a tape deck is playing back or recording, the tape running speed of the first tape deck may temporarily change.**
  Therefore, operate a second tape deck only after the first has stopped playing or recording.
- **Before turning the power OFF, be sure to release the cassette deck's playback or recording mode.**
- **To stop the cassette deck with the remote control when the REMOTE STANDBY indicator is blinking on the front panel, be sure to press the STOP / EJECT (■ ▲) button so that the indicator goes off before setting the POWER button OFF.**

- **Wird bei Wiedergabe oder Aufnahme mit einem Deck ein weiters Deck betrieben, kann die Bandlaufgeschwindigkeit des ersten Decks kurzzeitig schwanken.**
  Daher ein zweites Deck erst betreiben, wenn die Wiedergabe oder Aufnahme des ersten Decks beendet ist.
- **Vor Abschaltung des Geräts stets erst die Wiedergabe- oder Aufnahmefunktion abschalten.**
- **Soll das Cassettenlaufwerk per Fernbedienung bei blinkender REMOTE STANDBY-Anzeige an der Frontblende abgeschaltet weren, erst die STOP/EJECT-Taste (■ ▲) betätigen, so daß doese Anzeige erlischt. Dann das Gerät mit der POWER-Taste abshclaten.**

- **Si une seconde platine de magnétophone fonctionne pendant qu'une platine de magnétophone lit ou enregistre, la vitesse de défilement de la bande de la première platine peut changer temporairement.**
  Par conséquent, faire fonctionner la seconde platine de magnétophone seulement après que la première se soit arrêtée de lire ou d'enregistrer.
- **Avant de couper l'alimentation, s'assurer de bien libérer le mode de lecture ou d'enregistrement de la platine à cassette.**
- **Pour arrêter la platine à cassette avec la télécommande quand l'indicateur d'attente de télécommande de bande clignote sur le panneau avant, bien appuyer sur la touche STOP/EJECT (■ ▲) pour que l'indicateur s'éteigne avant de presser la touche POWER sur OFF.**

ERASING

Recording on a cassette automatically erases the previous sound.

To erase without making a new recording
Set the SOURCE SELECTOR to the tape position. Then, set tape deck B to the recording mode.

LÖSCHEN

Bei Aufnahme wird automatisch die vorhandene Bespielung gelöscht.

Löschung ohne Neuaufnahme
Den SOURCE SELECTOR auf die Position für Band einstellen. Dann Deck B auf Aufnahme schalten.

EFFACEMENT

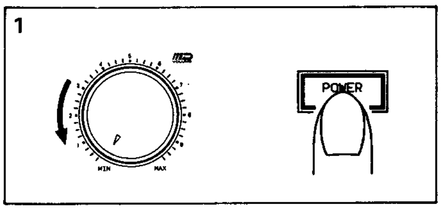
L'enregistrement d'une cassette efface automatiquement le son enregistré précédemment.

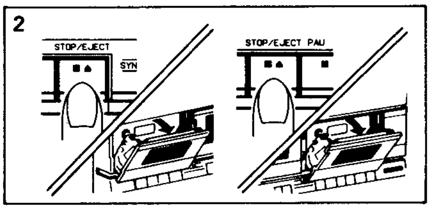
Pour effacer sans faire un nouvel enregistrement
Placer SOURCE SELECTOR sur la position bande. Puis, placer la platine à cassette B en mode d'enregistrement.

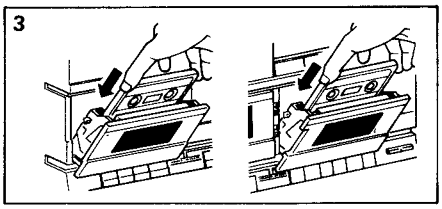
DUBBING

ÜBERSPIELEN

COPIE







Normal speed dubbing

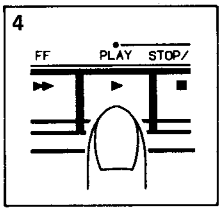
Dubbing means to copy a tape to another tape. Dubbing can be done from tape deck A to tape deck B.

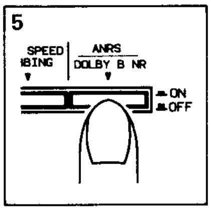
1. Press the POWER button to ON (▬) after setting the VOLUME knob to minimum.
2. Press the STOP/EJECT (■ ▲) buttons of tape deck A and B to open the cassette doors.
3. Insert cassettes.
4. Press the (▶) button of tape deck A to scan to the tune to be copied.
5. Set the ANRS/DOLBY B NR button to OFF (▀).
6. Set tape deck B to the record mode (while holding the REC (●) button down, press the PLAY (▶) button).
7. Set tape deck A to the play mode (press the (▶) button).
8. Press the TAPE button.
9. To release the dubbing mode, press the STOP/ EJECT (■ ▲) buttons of both tape deck A and B.

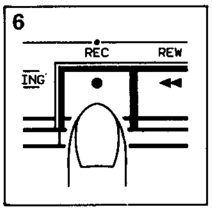
Note:
- **Pressing the source select buttons during dubbing switches the source for recording.**

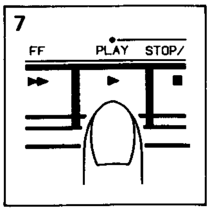
DUBBEN

COPIA DE CINTAS

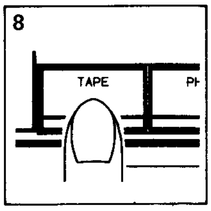


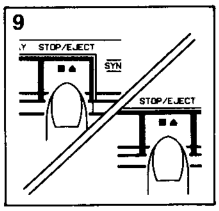


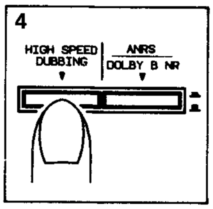


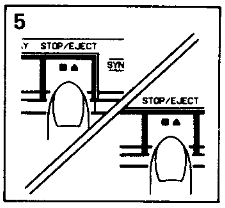


BANDKOPIERING









High speed dubbing
Steps 1, 2, and 3 are the same as for normal speed dubbing.

4. Press the HIGH SPEED DUBBING button.
   The indicator above it lights. Concerning the method of recording, follow steps 4 — 7 of "DUBBING" on page 35. During dubbing, the volume, tone or source selector may be set to any setting. For example, dubbing can be performed while listening to a broadcast.
5. To stop dubbing, press the STOP/EJECT (■ ⏏) button of tape deck A and B.

Notes:

- **During high speed dubbing, the recording is performed with the same NR mode as the played tape in tape deck A regardless of the setting of the ANRS/DOLBY B NR button.**
  (Even if the ANRS/DOLBY B NR button is pressed to ON, the NR system stays off and the ANRS/DOLBY B NR indicator does not light.)
- **Certain televisions may be affected by this unit during high speed dubbing. If this happens, turn the power of the TV off or move this unit away from the TV.**

Notes for dubbing

- **It is recommended to use the same type of tape for tape decks A and B because otherwise the recording level may be too high.**
- **As the tape length for recording may not be enough due to differences in tape speed between tape deck A and tape deck B and variations in tape length etc., use a tape with enough length for recording.**
- **S.E.A. recording is not possible during normal or high speed dubbing.**

Überspielen bei erhöhter Geschwindigkeit
Schritte 1, 2 und 3 entsprechen den Angaben für Überspielen in Normalgeschwindigkeit.

4. Die Taste für High Speed-Überspielen betätigen.
   Die Anzeige darüber leuchtet. Angaben zur Aufnahmedurchführung siehe Schritte 4 — 7 von Abschnitt "ÜBERSPIELEN" auf Seite 35. Während Überspielbetrieb können Lautstärke, Ton und Signalquelle beliebig gewählt werden. Während des Überspielbetriebs kann zum Beispiel auf Radiowiedergabe geschaltet werden.
5. Zur Abschaltung der Überspielfunktion die STOP/EJECT (■ ⏏) von Deck A und B betätigen.

Hinweise:

- **Bei High Speed-Überspielbetrieb erfolgt die Aufnahme mit der Rauschunterdrückung des Zuspielbandes in Deck A, ungeachtet von der Einstellung der ANRS/DOLBY B NR-Taste.**
  (Auch nach Betätigen der ANRS/DOLBY-Taste bleibt die Rauschunterdrückung abgeschaltet, die ANRS/DOLBY B NR-Anzeige leuchtet nicht.)
- **Bei High Speed-Überspielbetrieb können unter Umständen nahe aufgestellte TV-Geräte gestört werden. In diesem Fall das TV-Gerät abschalten oder dieses Gerät in ausreichender Entfernung vom TV-Gerät aufstellen.**

Hinweise zum Überspielbetrieb

- **In Deck A und B Cassetten mit identischen Bandsorten einlegen. Andernfalls kann der Aufnahmepegel zu hoch ausfallen.**
- **Auf ausreichende Länge des Aufnahmebands achten, da die Bandlaufgeschwindgkeiten zwischen Deck A und B differieren können, unterschiedliche Bandlängen vorliegen können etc.**
- **Bei Überspielen in normaler/hoher Geschwindigkeit ist keine S.E.A.-Aufnahme möglich.**

Copie à grande vitesse
Les étapes 1, 2 et 3 sont les mêmes que pour la copie à vitesse normale.

4. Appuyer sur la touche de copie à grande vitesse. L'indicateur au-dessus s'allume. A propose de la méthode d'enregistrement, suivre les étapes 4 à 7 de "COPIE" à la page 35.
   Pendant la copie, le volume, la tonalité ou le sélecteur de source peuvent être réglés sur toute position. Par exemple, la copie peut être effectuée tout en écoutant une émission.
5. Pour arrêter la copie, appuyer sur STOP/EJECT (■ ⏏) de la platine A et B.

Remarques:

- **Pendant la copie à grande vitesse, l'enregistrement est effectué avec le même mode de réduction de bruit que celui de la bande lue sur la platine A quelque soit le réglage de la touche ANRS/DOLBY B NR.**
  (Même si la touche ANRS/DOLBY B NR est pressée, le système de réduction de bruit ne fonctionne pas et l'indicateur ANRS/DOLBY B NR ne s'allume pas.)
- **Certains téléviseurs peuvent être affectés par cet appareil pendant la copie à grande vitesse. Si cela arrive, couper l'alimentation du téléviseur ou éloigner l'appareil du téléviseur.**

Remarques sur la copie

- **Il est recommandé d'utiliser le même type de bande pour les platines à cassette A et B sinon le niveau d'enregistrement risque d'être trop élevé.**
- **Comme la longueur de la bande pour l'enregistrement peut ne pas être suffisante à cause des différences de vitesse de bande entre les platines à cassette A et B et des variations de longueur de bande etc., utiliser une bande avec une longueur suffisante pour l'enregistrement.**
- **L'enregistrement S.E.A. n'est pas possible pendant la copie normale ou à grande vitesse.**

CASSETTE TAPE

- **Tape type**

The following two types of tape can be used for this unit.

- NORMAL (TYPE I)
- METAL (TYPE IV)

The following tape are available from JVC.

Normal tape (TYPE I)	UFI, FI
Metal tape (TYPE IV)	ME-PII

Note:

- **Using a Chrome (TYPE II) or Ferri-chrome tape is not recommended because this unit does not have the required characteristics.**

CASSETTENBAND

- **Bandsorte**

Die folgenden beiden Bandsorten können für dieses Gerät verwendet werden.

- NORMAL (TYPE I)
- METAL (TYPE IV)

JVC bietet folgende Bandsorten an.

Normalband (TYPE I)	UFI, FI
Metallband (TYPE IV)	ME-PII

Hinweis:

- **Die Verwendung von Chrom-(TYPE II) oder Ferrichrombändern wird nicht empfohlen, da dieses Gerät nicht die erforderliche Voreinstellung durchführen kann.**

CASSETTE

- **Type de bande**

Les deux types de bandes suivants peuvent être utilisés pour cet appareil.

- NORMAL (TYPE I)
- METAL (TYPE IV)

les bandes suivantes sont disponibles chez JVC.

Bande normale (TYPE I)	UFI, FI
Bande métal (TYPE IV)	ME-PII

Remarque:

- **L'utilisation d'une bande Chrome (TYPE II) ou Ferri-chrome n'est pas conseillée parce que l'appareil n'a pas les caractéristiques exigées.**

MAINTENANCE

Head cleaning
Head cleaning is required to assure optimum performance. The heads which come into contact with the tape attract minute particles of dust and become dirty.
If the heads are dirty ....
- Sound quality becomes poor.
- The sound level drops.
- Recording becomes impossible.
- Sound is interrupted.
- Previous recordings are not erased.

Because of this, keep the heads clean.

Wipe the heads with a cleaning stick or cloth moistened with alcohol (not too much).

Notes:
- **Do not bring any iron object, magnet screwdriver, etc. close to the heads.**
- **Do not use force so the right head positions are kept.**
- **Make sure to turn the power off when cleaning.**

Cleaning the pinch roller and capstan
Wipe the pinch roller and capstan referring to "Head cleaning".

Demagnetizing
If the heads become magnetized, noise will occur and high frequency response will deteriorate. In this case, set the POWER button to OFF and demagnetize the heads with a head demagnetizer. For more details, refer to the instruction book of the demagnetizer.

WARTUNG

Kopfreinigung
Um eine optimale Leistung zu gewährleisten, müssen die Köpfe regelmäßig gereinigt werden. Durch den Kontakt mit dem Band sammeln sich auf den Köpfen Staubpartikel an.
Wenn die Köpfe schmutzig sind....
- Verschlechtert sich die Klangqualität.
- Verringert sich die Lautstärke.
- Ist Aufnehmen nicht mehr möglich.
- Wird der Ton unterbrochen.
- Werden bei Neuaufnahmen die alten Aufnahmen nicht vollständing gelöscht.

Aus diesen Gründen müssen die Köpfe sauber gehalten werden.

Die Köpfe mit einem Wattestäbchen oder einem Tuch, das mit wenig Alkohol befeuchtet wurde, reinigen.

Hinweise:
- **Keine Gegenstände aus Eisen, magnetische Schraubenzieher usw. in die Nähe der Köpfe bringen.**
- **Nicht zu stark drücken, um die Positionen der Köpfe nicht zu verändern.**
- **Vor der Reinigung das Gerät ausschalten.**

Reinigung der Andruckrolle und der Tonwelle
Die Andruckrollen und Tonwellen auf die gleiche Weise wie die Köpfe reinigen, siehe "Kopfreinigung".

Entmagnetisierung
Wenn die Köpfe magnetisiert sind, treten Störgeräusche auf und die hohen Frequenzen werden schlechter. In diesem Fall das Gerät ausschalten und die Köpfe mit einem Tonkopf-Entmagnetisierer entmagnetisieren. Für genaue Einzelheiten siehe die Bedienungsanleitung des Entmagnetisierers.

ENTRETIEN

Nettoyage des têtes
Le nettoyage des têtes est nécessaire pour garantir de bonnes performances. Les têtes en contact avec la bande retiennent de minuscules particules de poussière et se salissent.
Si les têtes sont sales ....
- La qualité sonore est mauvaise.
- Le niveau sonore baisse.
- L'enregistrement devient impossible.
- Le son est interrompu.
- Les enregistrements précédents ne sont pas effacés.

A cause de ces conséquences, garder les têtes propres.

Essuyer les têtes avec un coton-tige ou un chiffon imbibé d'alcool (en petite quantité).

Remarques:
- **Ne pas approcher d'objet en fer, de tournevis magnétisé etc. des têtes.**
- **Ne pas utiliser la force pour que la position des têtes ne soit pas modifiée.**
- **Bien couper l'alimentation lors du nettoyage.**

Nettoyage du galet presseur et du cabestan
Les essuyer en vous référant à "Nettoyage des têtes".

Démagnétisation
Si les têtes se magnétisent, du bruit se produira et la réponse des hautes fréquences se détériorera. Dans ce cas, mettre l'interrupteur POWER sur OFF et démagnétiser les têtes avec un démagnétiseur de tête. Pour plus de détails, se référer à son manuel d'instructions.

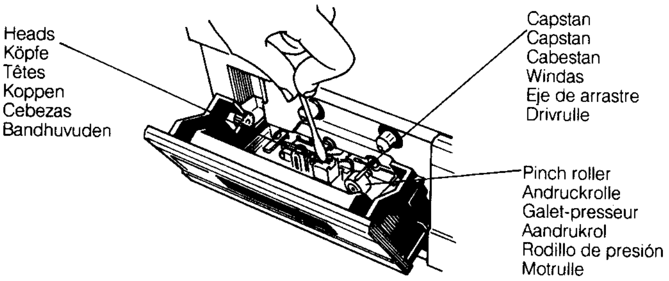


Fig. 16
Abb. 16
Afb. 16

TROUBLESHOOTING

What appears to be a malfunction may not always be serious.
Make sure first ....
Recording is impossible
Is the protective tab broken?
— Seal the hole with adhesive tape.
When the HIGH SPEED DUBBING button is depressed, the PLAY, REW (rewind) and FF (fast-forward) buttons do not function.

STÖRUNGSSUCHE

Was wie eine Fehlfunktion erscheint, muß nicht immer ernsthaft sein.
Überprüfen Sie zuerst ....
Aufnahme ist nicht möglich
Ist die Aufnahmeschutzzunge herausgebrochen?
— Die Öffung mit einem Klebeband verschließen.
Bei gedrückter HIGH SPEED DUBBING-Taste sind die Tasten PLAY, REW (Rückspulen) und FF (Vorspulen) ohne Funktion.

EN CAS DE DIFFICULTE

Ce qui semble au départ être un mauvais fonctionnement n'est pas toujours très sérieux.
Assurez-vous d'abord que .....
L'enregistrement est impossible
La languette de sécurité est-elle brisée?
— Reboucher le trou avec de l'adhésif.
Quand la touche HIGH SPEED DUBBING est pressée, les touches PLAY (lecture), REW (rebobinage) et FF (avance rapide) ne fonctionnent pas.

SPECIFICATIONS

AMPLIFIER SECTION
Output power : **25 watts per channel, min. RMS, both channels driven, into 8 ohms from 40 Hz to 20 kHz, with no more than 0.9 % total harmonic distortion.**
30 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.9 % total harmonic distortion.
Input sensitivity/impedance
PHONO : 3 mV/47 kohms
CD : 500 mV/47 kohms
VIDEO/AUX : 300 mV/47 kohms
S.E.A. graphic equalizer
Center frequencies : 63 Hz, 250 Hz, 1 kHz, 4 kHz, 16 kHz
Control range : +10 dB ±1 dB, −10 dB ±1 dB
FM TUNER SECTION
Tuning range : 87.5 MHz — 108.0 MHz
Usable sensitivity : 0.95 μV/75 ohms
1.5 μV/75 ohms (DIN)
Signal to noise ratio : Mono 80 dB (A-net)
Stereo 73 dB (A-net)
Mono 72 dB (DIN)
Stereo 64 dB (DIN)
Stereo separation : 40 dB at 1 kHz, 35 dB at 1 kHz (DIN)
AM TUNER SECTION
MW
Channel space 9 kHz : 522 kHz — 1629 kHz
Channel space 10 kHz : 530 kHz — 1630 kHz
530 kHz — 1710 kHz (for USA & Canada only)
Sensitivity : 300 μV/m (at 1000 kHz or 999 kHz)
LW (DR-E300LBK only)
Tuning range : 144 kHz — 353 kHz
144 kHz — 290 kHz (for Italy only)
Sensitivity : 600 μV/m (at 245 kHz)
CASSETTE SECTION
Head Deck A : Metaperm (play)
Deck B : Metaperm (play/rec)
Ferrite (erase)
Frequency response : Normal tape: 30 Hz — 17 kHz (-20 dB rec/play)
Metal tape: 30 Hz — 18 kHz (-20 dB rec/play)
Wow and flutter : 0.16 % (WRMS), 0.27 % (CCIR WTD)
Signal to noise ratio : 57 dB (metal tape)
GENERAL
Dimensions : 360(W) x 263(H) x 237(D) mm (14-3/16" x 10-3/8" x 9-3/8")
Weight : 5.6 kg (12.4 lbs)

Design and specifications subject to change without notice.

TECHNISCHE DATEN

VERSTÄRKERTEIL
Ausgangsleistung : 25 Watt pro Kanal, min. eff., beide Kanäle ausgesteuert auf 8 Ohm für 40 Hz bis 20 kHz mit nicht mehr als 0,9 % Klirrfaktor.
30 Watt pro Kanal, min. eff., beide Kanäle an 8 Ohm bei 1 kHz, bei Klirrfaktor nicht über 0,9 %.
Eingangsempfindlichkeit/Impedanz
PHONO : 3 mV/47 kOhm
CD : 500 mV/47 kOhm
VIDEO/AUX : 300 mV/47 kOhm
S.E.A. Graphic Equalizer
Mittenfrequenzen : 63 Hz, 250 Hz, 1 kHz, 4 kHz, 16 kHz
Regelbereich : +10 dB ±1 dB, −10 dB ±1 dB
UKW-TUNERTEIL
Abstimmbereich : 87,5 MHz — 108,0 MHz
Nutzbare Empfindlichkeit : 0,95 μV/75 Ohm, 1,5 μV/75 Ohm (DIN)
Störspannungsabstand : Mono 80 dB (A-Netzwerk)
Stereo 73 dB (A-Netzwerk)
Mono 72 dB (DIN)
Stereo 64 dB (DIN)
Stereokanaltrennung : 40 dB bei 1 KHz, 35 dB bei 1 kHz (DIN)
AM-TUNERTEIL
MW
Abstimmbereich Kanalabstand 9 kHz : 522 kHz — 1629 kHz
Kanalabstand 10 kHz : 530 kHz — 1630 kHz
530 kHz — 1710 kHz (Für U.S.A. und Kanada)
Empfindlichkeit : 300 μV/m (bei 1000 kHz oder 999 kHz)
LW (nur DR-E300LBK)
Abstimmbereich : 144 kHz — 353 kHz
144 kHz — 290 kHz (nur Italien)
Empfindlichkeit : 600 μV/m (bei 245 kHz)
KASSETTENTEIL
Kopf Deck A : Metaperm (Wiedergabe)
Deck B : Metaperm (Wiedergabe/Aufnahme)
Ferrit (Löschen)
Frequenzgang : Normalband: 30 Hz — 17 kHz (-20 dB Aufn./Wiederg.)
Metallband: 30 Hz — 18 kHz (-20 dB Aufn./Wiederg.)
Gleichlaufschwankungen : 0,16 % (WRMS), 0,27 % (CCIR WTD)
Störspannungsabstand : 57 dB (Metallband)
ALLGEMEIN
Abmessungen : 360(B) x 263(H) x 237(T) mm
Gewicht : 5,6 kg

Technische Änderungen vorbehalten.

CARACTERISTIQUES TECHNIQUES

SECTION AMPLIFICATEUR
Puissance de sortie : 25 watts par canal, min. RMS, les deux canaux entraînés sur 8 ohms, de 40 Hz à 20 kHz avec moins de 0,9 % de distortion harmonique totale.
30 watts par canal, min. RMS, les deux canaux commandés, sur 8 ohms à 1 kHz avec pas plus de 0,9 % de distorstion harmonique totale.
Sensibilité d'entrée/impédance
PHONO : 3 mV/47 kohms
CD : 500 mV/47 kohms
VIDEO/AUX : 300 mV/47 kohms
Egaliseur graphique S.E.A.
Fréquences centrales : 63 Hz, 250 Hz, 1 kHz, 4 kHz, 16 kHz
Gamme de commande : +10 dB ± 1 dB
-10 dB ± 1 dB
SECTION SYNTONISEUR FM
Gamme d'accord : 87,5 MHz — 108,0 MHz
Sensibilité utilisable : 0,95 μV/75 ohms, 1,5 μV/75 ohms (DIN)
Rapport signal/bruit : Mono 80 dB (réseau A)
Stéréo 73 dB (réseau A)
Mono 72 dB (DIN)
Stéréo 64 dB (DIN)
Séparation stéréo : 40 dB à 1 kHz, 35 dB à 1 kHz (DIN)
SECTION SYNTONISEUR AM
PO
Gamme d'accord
Espacement de canal 9 kHz : 522 kHz — 1629 kHz
Espacement de canal 10 kHz : 530 kHz — 1630 kHz
530 kHz — 1710 kHz (Pour Etats-Unis et Canada)
Sensibilité : 300 μV/m (à 1000 kHz ou 999 kHz)
GO (DR-E300LBK seulement)
Gamme d'accord : 144 kHz — 353 kHz
144 kHz — 290 kHz (pour l'Italie seulement)
Sensibilité : 600 μV/m (à 245 kHz)
SECTION CASSETTE
Tête Platine A : Métaperm (lecture)
Platine B : Métaperm (lecture/enregistrement)
Ferrite (effacement)
Réponse en fréquence : Bande normale: 30 Hz — 17 kHz (-20 dB enregistrement/lecture)
Bande Métal: 30 Hz — 18 kHz (-20 dB enregistrement/lecture)
Pleurage et scintillement : 0,16 % (WRMS), 0,27 % (CCIR WTD)
Rapport signal/bruit : 57 dB (bande métal)
GENERALES
Dimensions : 360(L) x 263(H) x 237(P) mm
Poids : 5,6 kg

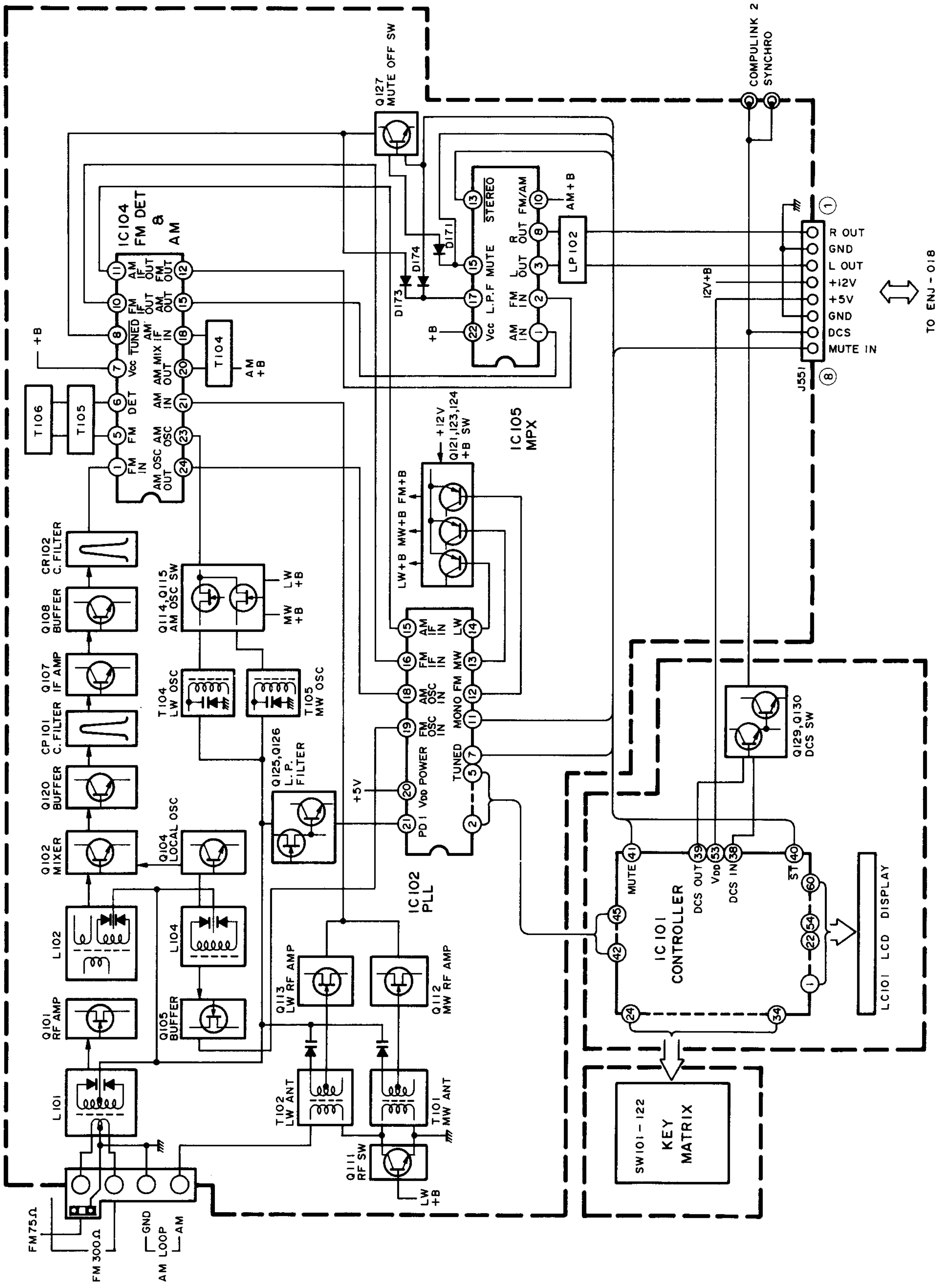
Présentation et caractéristiques modifiables sans préavis.

POWER SPECIFICATIONS

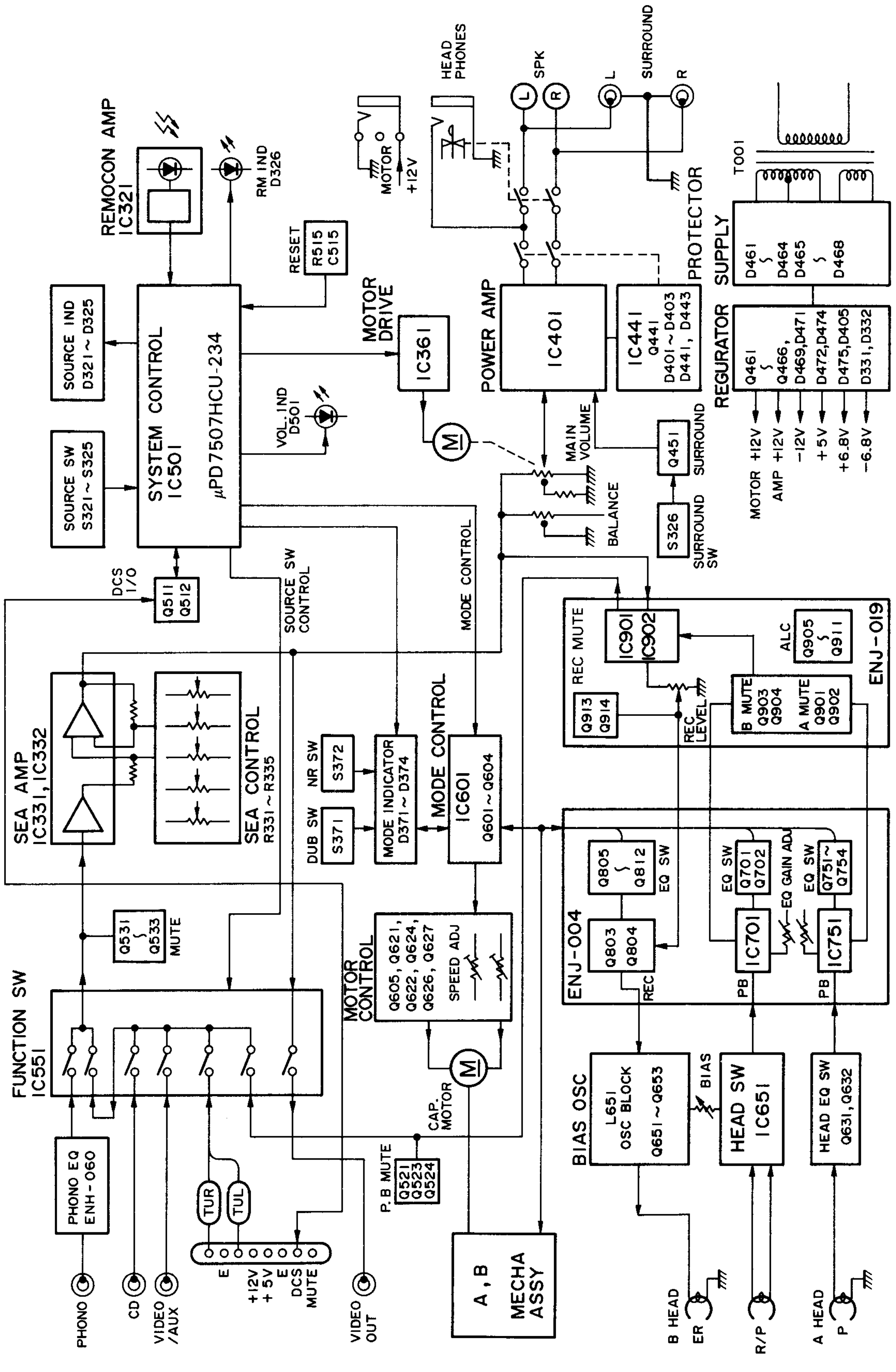
Areas	Line Voltage & Frequency	Power Consumption
U.S.A.	AC 120 V∿, 60 Hz	130 watts 160 VA
Canada		
U.K.	AC 240 V∿, 50 Hz	200 watts
Australia		
Continental Europe	AC 220 V∿, 50 Hz	110 watts
Other Areas	AC 110/120/220/240 V∿, selectable, 50/60 Hz	

Block Diagram

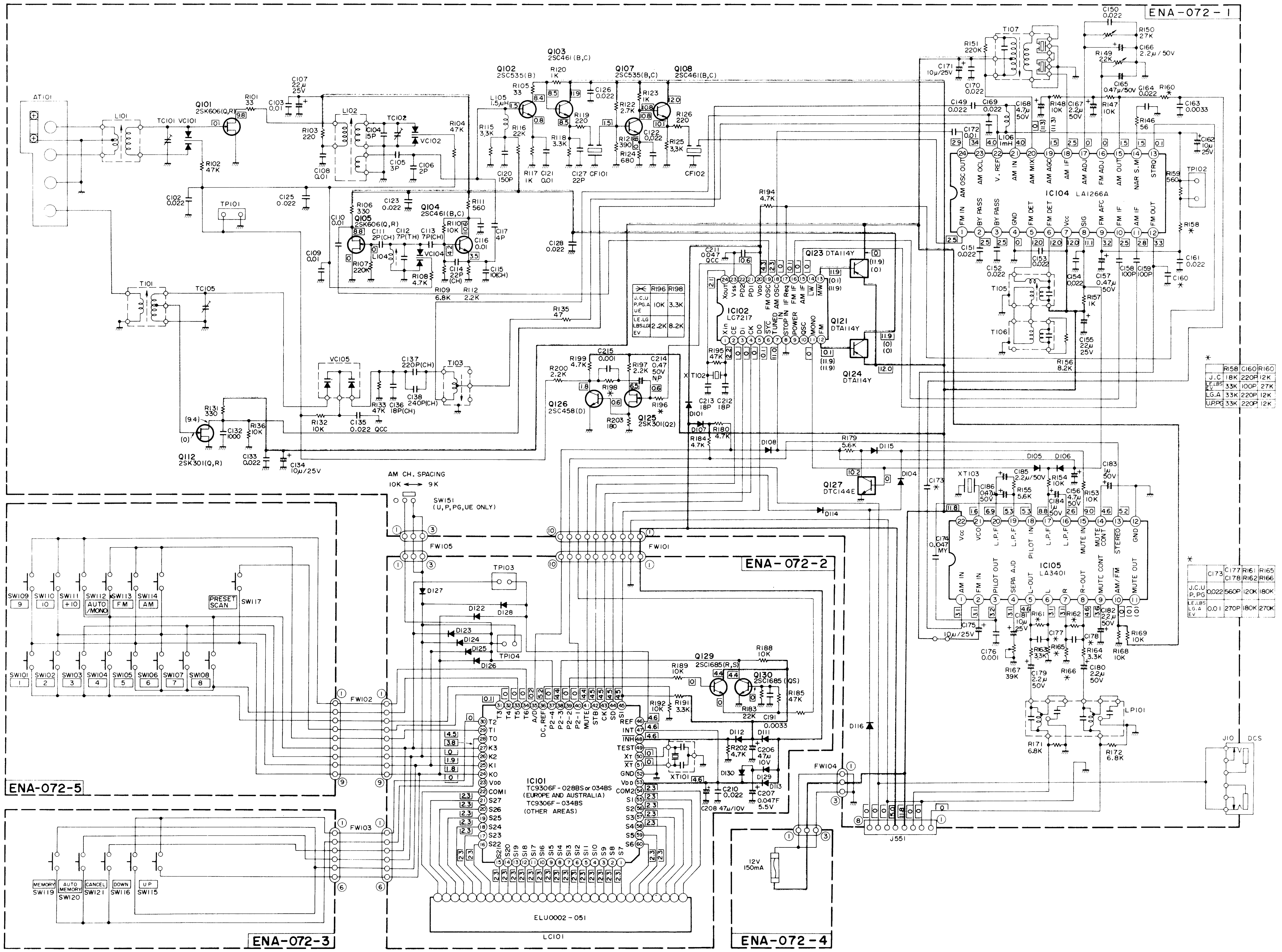
■ Tuner Section


Q127 MUTE OFF SW
COMPULINK 2 SYNCHRO
IC104 FM DET & AM
AM IF OUT
FM IF OUT
TUNED
AM MIX IF IN
AM MIX OUT
AM IN
AM OSC
AM OSC OUT
FM IN
FM
FM DET
Vcc
FM OUT
AM OUT
+B
T104
AM +B
T106
T105
STEREO
FM/AM
AM+B
R OUT
L OUT
LP102
MUTE
L.P.F
FM IN
AM IN
Vcc
D171
D173
D174
R OUT
GND
L OUT
+12V
+5V
GND
DCS
MUTE IN
J551
12V+B
TO ENJ-018
IC105 MPX
+12V
Q121,123,124 +B SW
LW+B
MW+B
FM+B
CR102 C.FILTER
Q108 BUFFER
Q107 IF AMP
CP101 C.FILTER
Q120 BUFFER
Q102 MIXER
Q104 LOCAL OSC
Q114,Q115 AM OSC SW
LW +B
MW +B
T104 LW OSC
T105 MW OSC
Q125,Q126 L.P. FILTER
+5V
AM IF IN
FM IF IN
AM OSC IN
FM OSC IN
Vdd POWER
PD1
LW
MW
FM
MONO
TUNED
IC102 PLL
Q129,Q130 DCS SW
MUTE
DCS OUT
Vdd
DCS IN
ST
IC101 CONTROLLER
LC101 LCD DISPLAY
L102
L104
Q101 RF AMP
Q105 BUFFER
Q113 LW RF AMP
Q112 MW RF AMP
L101
T102 LW ANT
T101 MW ANT
Q111 RF SW
LW +B
SW101 - 122 KEY MATRIX
FM75Ω
FM 300Ω
GND
AM LOOP
AM

■ Cassette & Audio Amplifier Section


REMOCON AMP
IC321
RM IND
D326
RESET
R515
C515
SOURCE IND
D321 ~ D325
SYSTEM CONTROL
IC501
μPD7507HCU-234
SOURCE SW
S321 ~ S325
VOL. IND
D501
MOTOR DRIVE
IC361
MOTOR
+12V
HEAD PHONES
SPK
L
R
SURROUND
POWER AMP
IC401
IC441
Q441
D401 ~ D403
D441, D443
PROTECTOR
T001
SUPPLY
D461 ~ D464
D465 ~ D468
REGULATOR
Q461 ~ Q466,
D469, D471
D472, D474
D475, D405
D331, D332
MOTOR +12V
AMP +12V
−12V
+5V
+6.8V
−6.8V
MAIN VOLUME
BALANCE
Q451
SURROUND
S326
SURROUND SW
DCS I/O
Q511
Q512
SOURCE SW CONTROL
MODE CONTROL
REC MUTE
IC901
IC902
ALC
Q905 ~ Q911
Q913
Q914
REC LEVEL
B MUTE
Q903
Q904
A MUTE
Q901
Q902
ENJ-019
SEA AMP
IC331, IC332
SEA CONTROL
R331 ~ R335
NR SW
S372
DUB SW
S371
MODE INDICATOR
D371 ~ D374
MODE CONTROL
IC601
Q601 ~ Q604
Q805 ~ Q812
EQ SW
Q701
Q702
EQ GAIN ADJ
Q751 ~ Q754
Q803
Q804
IC701
IC751
ENJ-004
REC
PB
Q531 ~ Q533
MUTE
MOTOR CONTROL
Q605, Q621,
Q622, Q624,
Q626, Q627
SPEED ADJ
FUNCTION SW
IC551
CAP. MOTOR
BIAS OSC
L651
OSC BLOCK
Q651 ~ Q653
BIAS
HEAD SW
IC651
HEAD EQ SW
Q631, Q632
PHONO EQ
ENH-060
TUR
TUL
P.B MUTE
Q521
Q523
Q524
A, B
MECHA ASSY
PHONO
CD
VIDEO /AUX
E
+12V
+5V
E
DCS
MUTE
VIDEO OUT
B HEAD
ER
R/P
A HEAD
P

Schematic Diagrams (1) FM/AM Tuner Section


ENA-072-1
ENA-072-2
ENA-072-3
ENA-072-4
ENA-072-5
AT101
Q101 2SK606(Q,R)
Q102 2SC535(B)
Q103 2SC461(B,C)
Q104 2SC461(B,C)
Q105 2SK606(Q,R)
Q107 2SC535(B,C)
Q108 2SC461(B,C)
Q112 2SK301(Q,R)
Q121 DTA114Y
Q123 DTA114Y
Q124 DTA114Y
Q125 2SK301(Q2)
Q126 2SC458(D)
Q127 DTC144E
Q129 2SC1685(R,S)
Q130 2SC1685(Q,S)
IC102 LC7217
IC104 LA1266A
IC105 LA3401
IC101 TC9306F-028BS or 034BS (EUROPE AND AUSTRALIA) TC9306F-034BS (OTHER AREAS)
LC101 ELU0002-051
AM CH. SPACING 10K ←→ 9K
SW151 (U, P, PG, UE ONLY)
SW109 9
SW110 10
SW111 +10
SW112 AUTO/MONO
SW113 FM
SW114 AM
SW117 PRESET SCAN
SW101 1
SW102 2
SW103 3
SW104 4
SW105 5
SW106 6
SW107 7
SW108 8
SW119 MEMORY
SW120 AUTO MEMORY
SW121 CANCEL
SW116 DOWN
SW115 UP
FW101
FW102
FW103
FW104
FW105
J551
J10 DCS
LP101
12V 150mA

✕	R196	R198
J.C.U P.PG.A UE	10K	3.3K
LE.LG LBS.LGI EV	2.2K	8.2K

*

	R158	C160	R160
J.C	18K	220P	12K
LE.LBS EV	33K	100P	27K
LG.A	33K	220P	12K
U.P.PG	33K	220P	12K

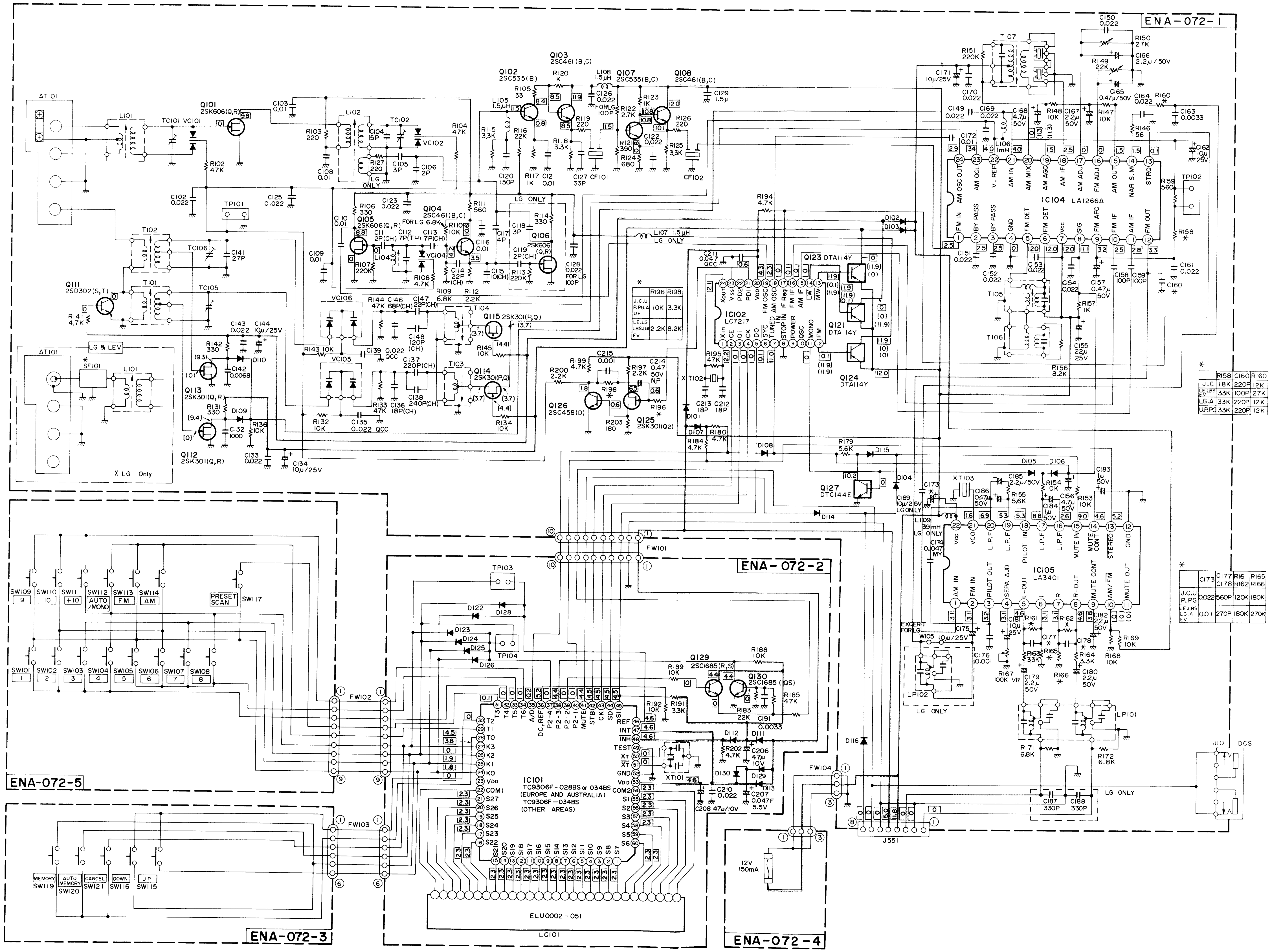
*

	C173	C177 C178	R161 R162	R165 R166
J.C.U P.PG	0.022	560P	120K	180K
LE.LBS LG.A EV	0.01	270P	180K	270K

Notes:

1. ▭ shows DC voltage to the chassis with no signal input.
2. indicates ±B power supply.
3. indicates signal path.
4. When replacing the parts in the darkned are (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

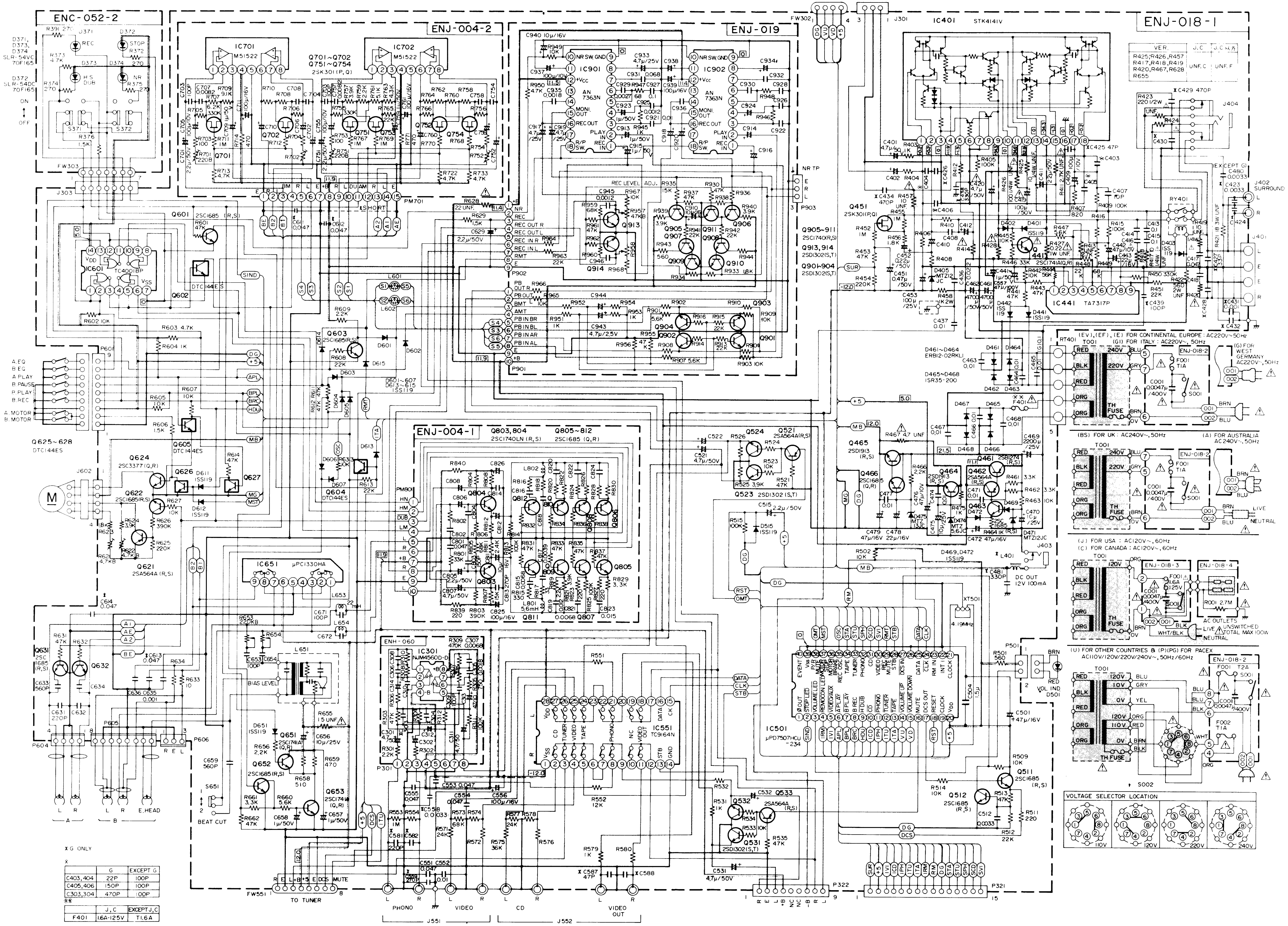
(2) FM/MW/LW Tuner Section


ENA-072-1
ENA-072-2
ENA-072-3
ENA-072-4
ENA-072-5
IC101
TC9306F-028BS or 034BS
(EUROPE AND AUSTRALIA)
TC9306F-034BS
(OTHER AREAS)
IC102 LC7217
IC104 LA1266A
IC105 LA3401
ELU0002-051
LC101
AT101
Q101 2SK606(Q,R)
Q102 2SC535(B)
Q103 2SC461(B,C)
Q104 2SC461(B,C)
Q105 2SK606(Q,R)
Q106 2SK606(Q,R)
Q107 2SC535(B,C)
Q108 2SC461(B,C)
Q111 2SD302(S,T)
Q112 2SK301(Q,R)
Q113 2SK301(Q,R)
Q114 2SK301(P,Q)
Q115 2SK301(P,Q)
Q121 DTA114Y
Q123 DTA114Y
Q124 DTA114Y
Q125 2SK301(Q2)
Q126 2SC458(D)
Q127 DTC144E
Q129 2SC1685(R,S)
Q130 2SC1685(Q,S)
FW101
FW102
FW103
FW104
J551
J10 DCS
12V 150mA
SW101 1
SW102 2
SW103 3
SW104 4
SW105 5
SW106 6
SW107 7
SW108 8
SW109 9
SW110 10
SW111 +10
SW112 AUTO/MONO
SW113 FM
SW114 AM
SW117 PRESET SCAN
SW119 MEMORY
SW120 AUTO MEMORY
SW121 CANCEL
SW116 DOWN
SW115 UP
LG & LEV
✱LG Only
LG ONLY

Notes:

1. ▭ shows DC voltage to the chassis with no signal input.
2. indicates ±B power supply.
3. indicates signal path.
4. When replacing the parts in the darkned are (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
The design and contents are subject to change without notice.

(3) Cassette & Power Amplifier Section


ENC-052-2
ENJ-004-2
ENJ-019
ENJ-018-1
ENJ-004-1
ENH-060
IC701 M51522
IC702 M51522
Q701~Q702
Q751~Q754
2SK301(P,Q)
IC901 AN7363N
IC902 AN7363N
IC401 STK4141V
IC441 TA7317P
IC601 TC4011BP
IC651 μPC1330HA
IC301
IC551 TC9164N
IC501 μPD7507HCU-234
J303
J301
J302
J304
J401
J402 SURROUND
J403
J404
J551
J552
PHONO
VIDEO
CD
VIDEO OUT
TO TUNER
FW551
P321
P322
XT501 4.19MHz
DC OUT 12V 100mA
VOLTAGE SELECTOR LOCATION
110V
120V
220V
240V
(EV),(EF),(E) FOR CONTINENTAL EUROPE : AC220V~50Hz
(G) FOR ITALY : AC220V~,50Hz
(BS) FOR UK : AC240V~,50Hz
(A) FOR AUSTRALIA AC240V~,50Hz
(J) FOR USA : AC120V~,60Hz
(C) FOR CANADA : AC120V~,60Hz
(U) FOR OTHER COUNTRIES & (P)(PG) FOR PACEX AC110V/120V/220V/240V~,50Hz/60Hz
AC OUTLETS UNSWITCHED TOTAL MAX 100W
BEAT CUT
E.HEAD

※G ONLY

※

	G	EXCEPT G
C403,404	22P	100P
C405,406	150P	100P
C303,304	470P	100P

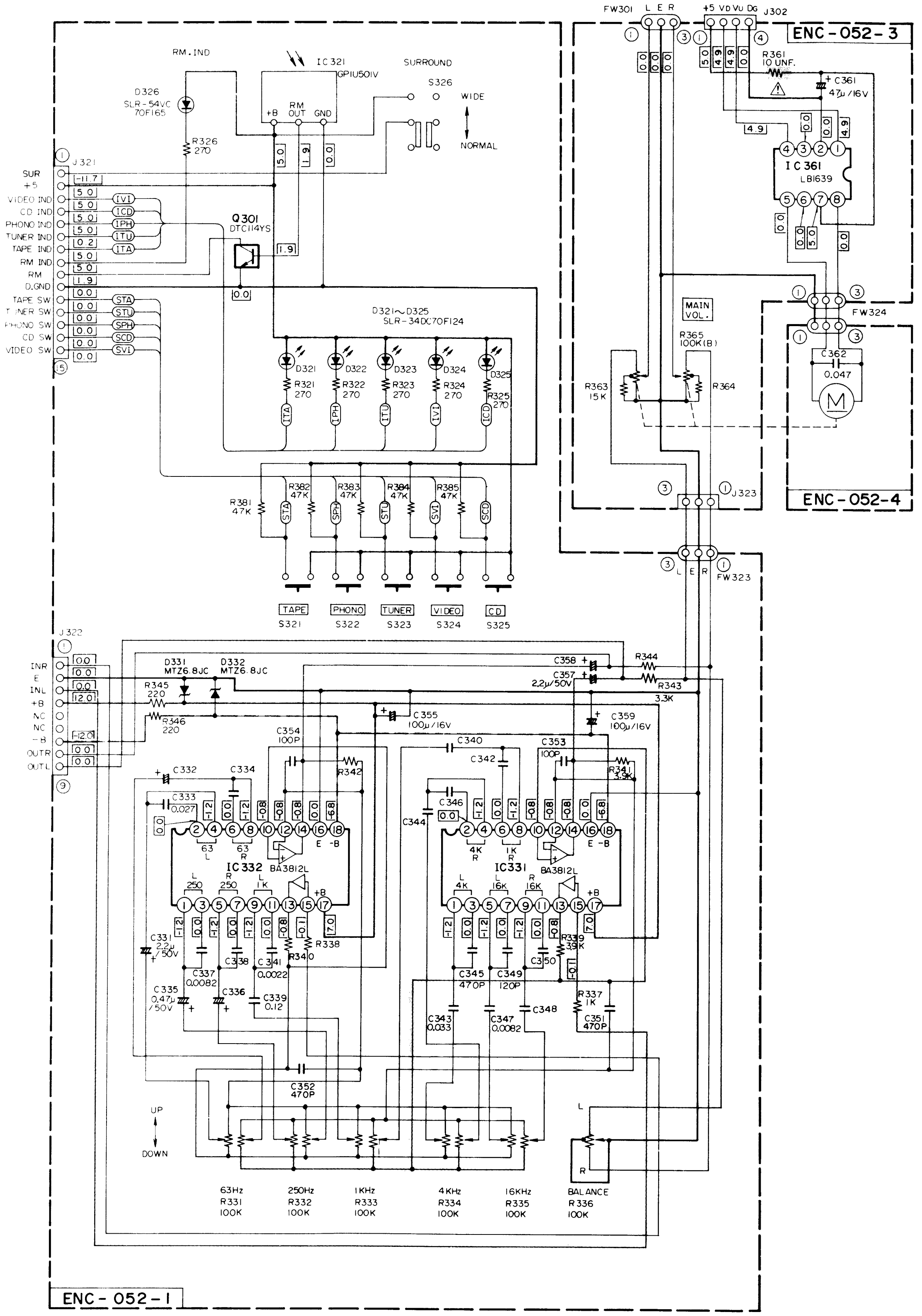
※※

	J,C	EXCEPT J,C
F401	1.6A-125V	T1.6A

Notes:

1. ▭ shows DC voltage to the chassis with no signal input.
2. indicates ±B power supply.
3. indicates signal path.
4. When replacing the parts in the darkned are (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
The design and contents are subject to change without notice.

(4) Remote-control Section


RM.IND
IC321 GP1U501V
SURROUND
S326
WIDE
NORMAL
D326 SLR-54VC 70F165
R326 270
+B RM OUT GND
J321
SUR
+5
VIDEO IND
CD IND
PHONO IND
TUNER IND
TAPE IND
RM IND
RM
D.GND
TAPE SW
TUNER SW
PHONO SW
CD SW
VIDEO SW
IVI
ICD
IPH
ITU
ITA
STA
STU
SPH
SCD
SVI
Q301 DTC114YS
D321~D325 SLR-34DC70F124
D321
D322
D323
D324
D325
R321 270
R322 270
R323 270
R324 270
R325 270
R381 47K
R382 47K
R383 47K
R384 47K
R385 47K
TAPE S321
PHONO S322
TUNER S323
VIDEO S324
CD S325
FW301 L E R
+5 VD VU DG J302
ENC-052-3
R361 10 UNF.
C361 47μ/16V
IC361 LB1639
MAIN VOL.
R365 100K(B)
R363 15K
R364
FW324
C362 0.047
M
J323
ENC-052-4
FW323
J322
INR
E
INL
+B
NC
NC
-B
OUTR
OUTL
D331 MTZ6.8JC
D332 MTZ6.8JC
R345 220
R346 220
C358
C357 2.2μ/50V
R344
R343 3.3K
C355 100μ/16V
C359 100μ/16V
C354 100P
C340
C353 100P
C342
R342
R341 3.3K
C332
C334
C333 0.027
C346
C344
IC332 BA3812L
IC331 BA3812L
63 L
63 R
250
250
1K
4K
16K
1K
C331 2.2μ/50V
C337 0.0082
C338
C341 0.0022
R340
R338
C335 0.47μ/50V
C336
C339 0.12
C345 470P
C349 120P
C350
R339 39K
R337 1K
C343 0.033
C347 0.0082
C348
C351 470P
C352 470P
UP
DOWN
63Hz R331 100K
250Hz R332 100K
1KHz R333 100K
4KHz R334 100K
16KHz R335 100K
BALANCE R336 100K
L
R
ENC-052-1

ENJ-018

IC401	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	-0.2	-0.2	0	-11.9	-1.3	0	0	0	-34.3	0	34.6	32.9	0	-34.3	-1.3	0	-0.2	-0.2

IC441	1	2	3	4	5	6	7	8	9
	-0.6	0	0	0	-0.7	1.0	0	1.3	2.8

IC501	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2.5	4.9	0.2	4.9	4.9	4.4	2.8	0	3.7	4.9	4.9	0.2	0.4	4.9	4.9	0	0	0	2.4	5.0
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
2.4	0	0	5.0	0	0	5.0	0	4.9	0	0	0	0	0	0	0	0	4.8	0	0	

IC551	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	-12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	0	0	0	0	0
21	22	23	24	25	26	27	28													
0	0	0	0	0	0	0	11.9													

IC651	1	2	3	4	5	6	7	8
	0	0	0	0	0	11.9	0	0

IC601	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	5.0	5.0	0	5.0	0	0	0	0	3.7	0	0	3.7	5.0	5.0

Q441			Q451			Q461			Q462			Q463			Q464			Q465			Q466		
B	C	E	G	D	S	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
-34.0	0	-34.1	0.5	0	0	20.6	11.1	21.0	19.9	11.1	20.6	11.0	19.9	10.4	5.6	10.6	5.0	12.4	21.3	11.9	13.0	21.3	12.4

Q511			Q512			Q521			Q523			Q524			Q531			Q532			Q533		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	5.0	0	0	5.0	0	4.2	4.8	4.8	0.6	0	0	0.6	0	0	-0.1	0	0	-0.1	0	0	0	-0.1	0

Q601			Q602			Q603			Q604			Q605			Q621			Q622			Q653		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	0	0	0	11.8	0	0.6	0	0	0	2.8	0	4.4	0	0	10.6	11.2	11.2	0.6	0	0	0	11.5	0

Q624			Q626			Q627			Q631			Q632			Q651			Q652		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	10.2	0	0	0	0	0	0	0	0.6	0	0	0.6	0	0	11.5	11.5	11.5	0.6	0	0

J303	1	2	3	4	5	6	7
	3.7	0	0.1	0	5.1	0	5.0

P602	1	2	3	4
	10.2	11.2	11.2	11.2

P601	1	2	3	4	5	6	7	8	9
	11.9	5.0	4.5	0	2.8	0	5.1	0	0

P501	1	2
	2.2	0.2

FW551	1	2	3	4	5	6	7	8
	0	0	0	12.0	5.1	0	0	0.2

ENH-060

IC301	1	2	3	4	5	6	7	8
	0	0	0	-11.8	0	0	0	12.0

P301	1	2	3	4	5	6	7	8
	0	0	0	12.0	-11.8	0	0	0

ENJ-004-1

PM801	1	2	3	4	5	6	7	8	9	10
	0	0	3.7	5.0	0	0	11.9	0	0	0

ENJ-004-2

PM701	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	0	0	0	11.9	0	0	0	11.9	0	0	0	11.9	0	0	0

ENJ-019

IC901	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	6.0	6.0	5.9	6.0	6.0	6.0	6.0	6.0	0	1.8	6.0	11.5	3.3	6.0	6.1	6.1	6.0	2.7

IC902	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	6.0	5.9	5.9	6.0	6.0	6.0	6.0	6.0	0	1.8	6.0	11.4	3.3	6.0	6.1	6.1	6.0	2.7

Q901			Q902			Q903			Q904			Q905			Q906			Q907			Q908		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0.6	0	0	0.6	0	0	0.6	0	0	0.6	0	0	0	11.9	0	0	11.9	0	0	11.9	0	0	11.9	0

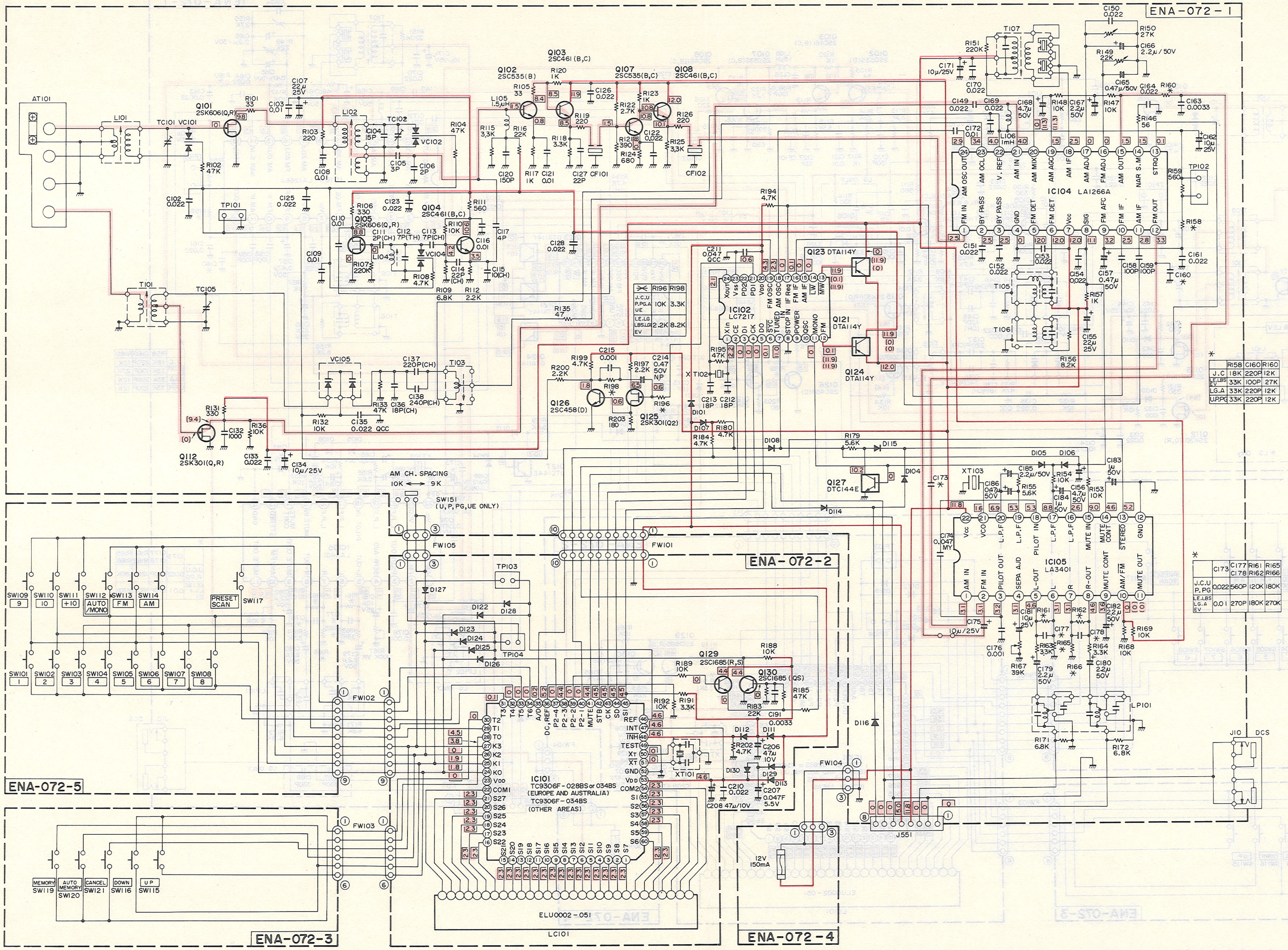
Q909			Q910			Q911			Q913			Q914		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	0	0	0	0	0	0.6	0	0	0.6	0	0	0.6	0	0

P901	1	2	3	4	5	6	7	8	9	10
	0	0	2.3	3.9	0	0	0	0	0	11.9

P902	1	2	3	4	5	6	7	-8	9
	11.4	0.1	2.7	0	0	0	0	3.3	0

Note:
The voltages have been measured under the conditions below.
SOURCE TUNER, VOLUME MIN, DECK A, B stop, SEA FLAT, BALANCE CENTER, SURROUND NOR., DOLBY NR OFF, HIGH SPEED DUBBING OFF

Schematic Diagrams (1) FM/AM Tuner Section


ENA-072-1
ENA-072-2
ENA-072-3
ENA-072-4
ENA-072-5
AT101
L101
TC101 VC101
Q101 2SK606(Q,R)
Q102 2SC535(B)
Q103 2SC461(B,C)
Q104 2SC461(B,C)
Q105 2SK606(Q,R)
Q107 2SC535(B,C)
Q108 2SC461(B,C)
Q112 2SK301(Q,R)
Q121 DTA114Y
Q123 DTA114Y
Q124 DTA114Y
Q125 2SK301(Q2)
Q126 2SC458(D)
Q127 DTC144E
Q129 2SC1685(R,S)
Q130 2SC1685(QS)
T101
T102
T105
T106
T107
TC105
VC105
CF101
CF102
TP101
TP102
TP103
TP104
IC104 LA1266A
AM OSC OUT
AM OSC
V. REF
AM IN
AM MIX
AM AGC
AM IF
FM ADJ
AM OUT
NAR S. M
STRQ
FM IN
BY PASS
GND
FM DET
Vcc
SIG
FM AFC
FM IF
AM IF
FM OUT
IC102 LC7217
IC105 LA3401
PILOT OUT
SEPA AJD
PILOT IN
L.P.F
MUTE IN
MUTE CONT
STEREO
AM/FM
MUTE OUT
L-OUT
R-OUT
IC101
TC9306F-028BS or 034BS
(EUROPE AND AUSTRALIA)
TC9306F-034BS
(OTHER AREAS)
ELU0002-051
LC101
AM CH. SPACING
10K ↔ 9K
SW151
(U, P, PG, UE ONLY)
FW101
FW102
FW103
FW104
FW105
SW101 1
SW102 2
SW103 3
SW104 4
SW105 5
SW106 6
SW107 7
SW108 8
SW109 9
SW110 10
SW111 +10
SW112 AUTO /MONO
SW113 FM
SW114 AM
SW117 PRESET SCAN
SW119 MEMORY
SW120 AUTO MEMORY
SW121 CANCEL
SW116 DOWN
SW115 UP
XT101
XT102
XT103
LP101
J10 DCS
J551
12V 150mA

✂	R196	R198
J.C.U P.PG.A UE	10K	3.3K
LE.LG LBS.LG EV	2.2K	8.2K

*

	R158	C160	R160
J.C	18K	220P	12K
LE.LBS EV	33K	100P	27K
LG.A	33K	220P	12K
U.P.PG	33K	220P	12K

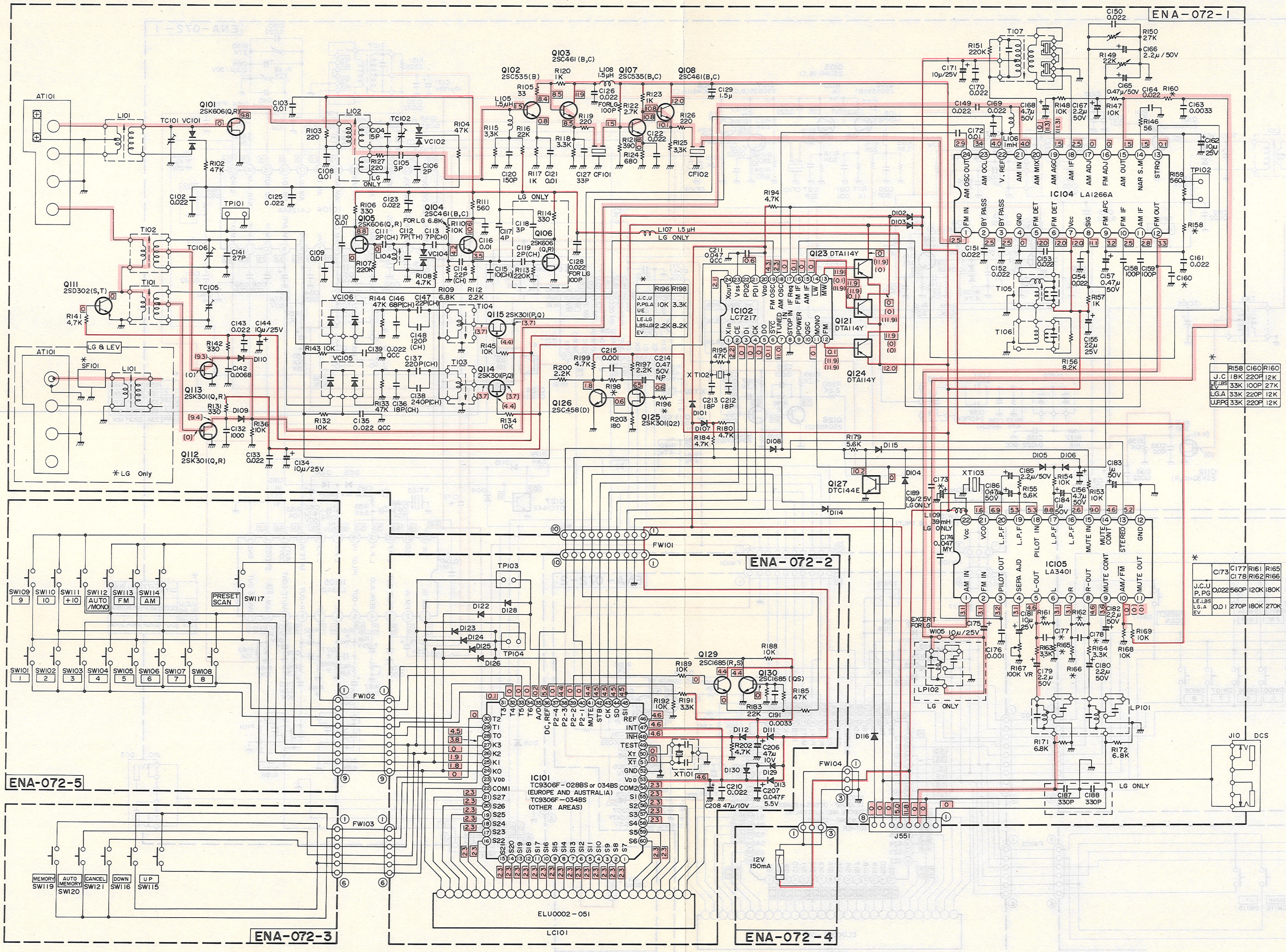
*

	C173	C177 C178	R161 R162	R165 R166
J.C.U P.PG	0.022	560P	120K	180K
LE.LBS LG.A EV	0.01	270P	180K	270K

Notes:

1. ▭ shows DC voltage to the chassis with no signal input.
2. — indicates ±B power supply.
3. ▬ indicates signal path.
4. When replacing the parts in the darkned are (▬) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

(2) FM/MW/LW Tuner Section


ENA-072-1
ENA-072-2
ENA-072-3
ENA-072-4
ENA-072-5
AT101
L101
TC101
VC101
Q101 2SK606(Q,R)
Q102 2SC535(B)
Q103 2SC461(B,C)
Q104 2SC461(B,C)
Q105 2SK606(Q,R)
Q106 2SK606(Q,R)
Q107 2SC535(B,C)
Q108 2SC461(B,C)
Q111 2SD302(S,T)
Q112 2SK301(Q,R)
Q113 2SK301(Q,R)
Q114 2SK301(P,Q)
Q115 2SK301(P,Q)
Q121 DTA114Y
Q123 DTA114Y
Q124 DTA114Y
Q125 2SK301(Q2)
Q126 2SC458(D)
Q127 DTC144E
Q129 2SC1685(R,S)
Q130 2SC1685(Q,S)
IC102 LC7217
IC104 LA1266A
IC105 LA3401
IC101 TC9306F-028BS or 034BS (EUROPE AND AUSTRALIA) TC9306F-034BS (OTHER AREAS)
ELU0002-051
LC101
FW101
FW102
FW103
FW104
J551
J10 DCS
LP101
LP102 LG ONLY
SF101
*LG Only
LG & LEV
TP101
TP102
TP103
TP104
XT101
XT103
X T102
CF101
CF102
T101
T102
T103
T104
T105
T106
T107
L107 1.5 μH LG ONLY
12V 150mA
SW101 1
SW102 2
SW103 3
SW104 4
SW105 5
SW106 6
SW107 7
SW108 8
SW109 9
SW110 10
SW111 +10
SW112 AUTO /MONO
SW113 FM
SW114 AM
SW117 PRESET SCAN
SW119 MEMORY
SW120 AUTO MEMORY
SW121 CANCEL
SW116 DOWN
SW115 UP

*

	R196	R198
J.C.U P.PG.A UE	10K	3.3K
LE.LG LBS.LGI EV	2.2K	8.2K

*

	R158	C160	R160
J.C	18K	220P	12K
LE.LBS EV	33K	100P	27K
LG.A	33K	220P	12K
U.P.PG	33K	220P	12K

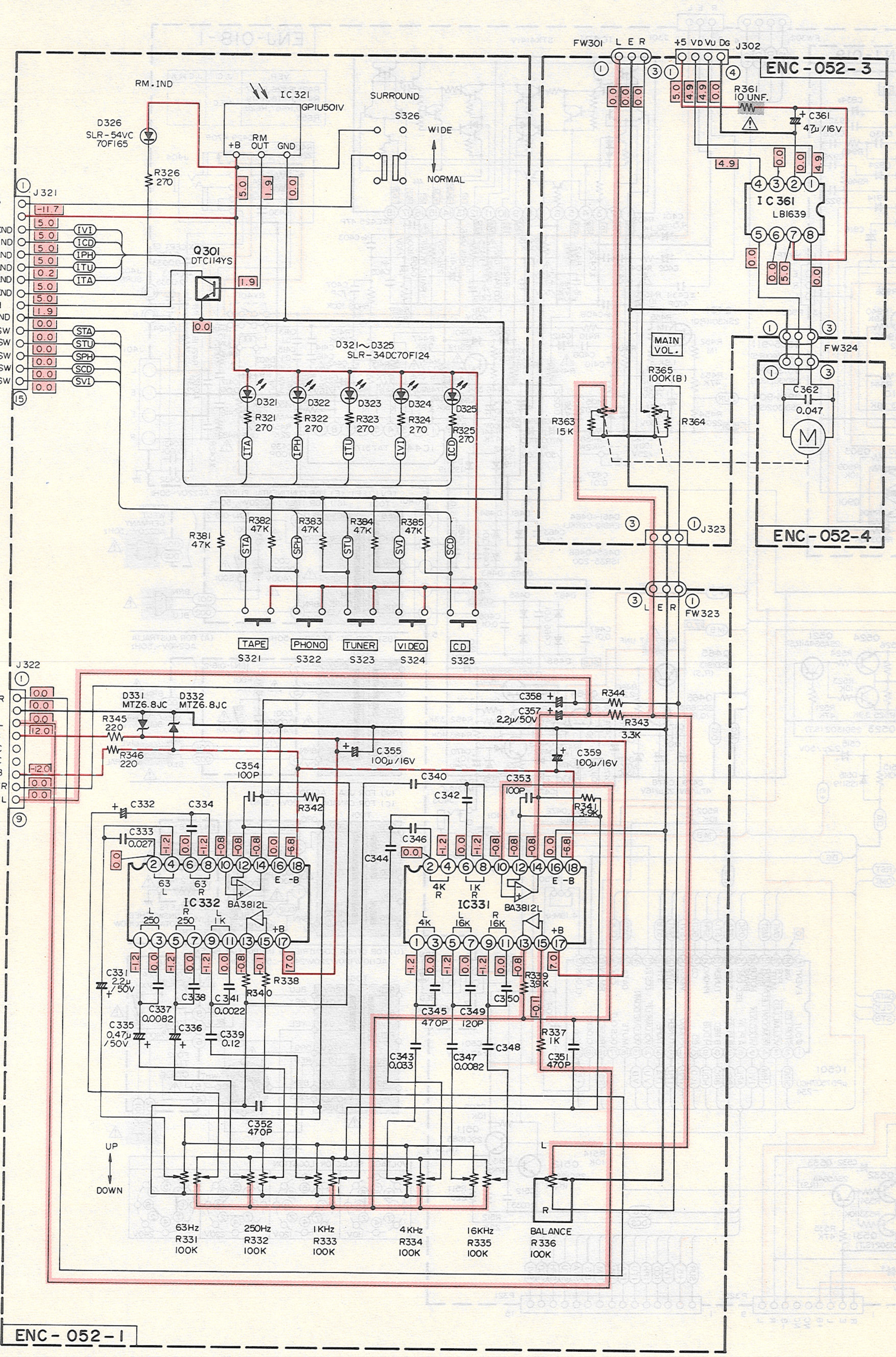
*

	C173	C177 C178	R161 R162	R165 R166
J.C.U P.PG	0.022	560P	120K	180K
LE.LBS LG.A EV	0.01	270P	180K	270K

Notes:

1. ▭ shows DC voltage to the chassis with no signal input.
2. —— indicates ±B power supply.
3. ▬ indicates signal path.
4. When replacing the parts in the darkned are (▬) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
The design and contents are subject to change without notice.

(4) Remote-control Section


FW301
L E R
+5 VD VU DG
J302
ENC-052-3
R361 10 UNF.
C361 47μ/16V
IC361 LB1639
FW324
C362 0.047
M
ENC-052-4
MAIN VOL.
R365 100K(B)
R363 15K
R364
J323
FW323
RM.IND
IC321 GP1U50IV
SURROUND
S326
WIDE
NORMAL
+B
RM OUT
GND
D326 SLR-54VC 70F165
R326 270
J321
SUR
+5
VIDEO IND
CD IND
PHONO IND
TUNER IND
TAPE IND
RM IND
RM
D.GND
TAPE SW
TUNER SW
PHONO SW
CD SW
VIDEO SW
Q301 DTC114YS
D321~D325 SLR-34DC70F124
D321
D322
D323
D324
D325
R321 270
R322 270
R323 270
R324 270
R325 270
R381 47K
R382 47K
R383 47K
R384 47K
R385 47K
TAPE S321
PHONO S322
TUNER S323
VIDEO S324
CD S325
J322
INR
E
INL
+B
NC
NC
-B
OUTR
OUTL
D331 MTZ6.8JC
D332 MTZ6.8JC
R345 220
R346 220
C358
C357 2.2μ/50V
R344
R343 3.3K
C355 100μ/16V
C359 100μ/16V
C354 100P
C340
C353 100P
C342
R342
R341 3.9K
C332
C334
C333 0.027
C346
C344
IC332 BA3812L
IC331 BA3812L
R340
R338
R339 3.9K
C331 2.2μ/50V
C337 0.0082
C338
C341 0.0022
C335 0.47μ/50V
C336
C339 0.12
C345 470P
C349 120P
C350
C343 0.033
C347 0.0082
C348
R337 1K
C351 470P
C352 470P
UP
DOWN
63Hz R331 100K
250Hz R332 100K
1KHz R333 100K
4KHz R334 100K
16KHz R335 100K
BALANCE R336 100K
ENC-052-1

ENJ-018

IC401	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	-0.2	-0.2	0	-11.9	-1.3	0	0	0	-34.3	0	34.6	32.9	0	-34.3	-1.3	0	-0.2	-0.2

IC441	1	2	3	4	5	6	7	8	9
	-0.6	0	0	0	-0.7	1.0	0	1.3	2.8

IC501	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2.5	4.9	0.2	4.9	4.9	4.4	2.8	0	3.7	4.9	4.9	0.2	0.4	4.9	4.9	0	0	0	2.4	5.0
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	2.4	0	0	5.0	0	0	5.0	0	4.9	0	0	0	0	0	0	0	0	4.8	0	0

IC551	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	-12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	0	0	0	0	0
	21	22	23	24	25	26	27	28												
	0	0	0	0	0	0	0	11.9												

IC651	1	2	3	4	5	6	7	8
	0	0	0	0	0	11.9	0	0

IC601	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	5.0	5.0	0	5.0	0	0	0	0	3.7	0	0	3.7	5.0	5.0

Q441			Q451			Q461			Q462			Q463			Q464			Q465			Q466		
B	C	E	G	D	S	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
-34.0	0	-34.1	0.5	0	0	20.6	11.1	21.0	19.9	11.1	20.6	11.0	19.9	10.4	5.6	10.6	5.0	12.4	21.3	11.9	13.0	21.3	12.4

Q511			Q512			Q521			Q523			Q524			Q531			Q532			Q533		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	5.0	0	0	5.0	0	4.2	4.8	4.8	0.6	0	0	0.6	0	0	-0.1	0	0	-0.1	0	0	0	-0.1	0

Q601			Q602			Q603			Q604			Q605			Q621			Q622			Q653		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	0	0	0	11.8	0	0.6	0	0	0	2.8	0	4.4	0	0	10.6	11.2	11.2	0.6	0	0	0	11.5	0

Q624			Q626			Q627			Q631			Q632			Q651			Q652		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	10.2	0	0	0	0	0	0	0	0.6	0	0	0.6	0	0	11.5	11.5	11.5	0.6	0	0

J303	1	2	3	4	5	6	7
	3.7	0	0.1	0	5.1	0	5.0

P602	1	2	3	4
	10.2	11.2	11.2	11.2

P601	1	2	3	4	5	6	7	8	9
	11.9	5.0	4.5	0	2.8	0	5.1	0	0

P501	1	2
	2.2	0.2

FW551	1	2	3	4	5	6	7	8
	0	0	0	12.0	5.1	0	0	0.2

ENH-060

IC301	1	2	3	4	5	6	7	8
	0	0	0	-11.8	0	0	0	12.0

P301	1	2	3	4	5	6	7	8
	0	0	0	12.0	-11.8	0	0	0

ENJ-004-1

PM801	1	2	3	4	5	6	7	8	9	10
	0	0	3.7	5.0	0	0	11.9	0	0	0

ENJ-004-2

PM701	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	0	0	0	11.9	0	0	0	11.9	0	0	0	11.9	0	0	0

ENJ-019

IC901	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	6.0	6.0	5.9	6.0	6.0	6.0	6.0	6.0	0	1.8	6.0	11.5	3.3	6.0	6.1	6.1	6.0	2.7

IC902	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	6.0	5.9	5.9	6.0	6.0	6.0	6.0	6.0	0	1.8	6.0	11.4	3.3	6.0	6.1	6.1	6.0	2.7

Q901			Q902			Q903			Q904			Q905			Q906			Q907			Q908		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0.6	0	0	0.6	0	0	0.6	0	0	0.6	0	0	0	11.9	0	0	11.9	0	0	11.9	0	0	11.9	0

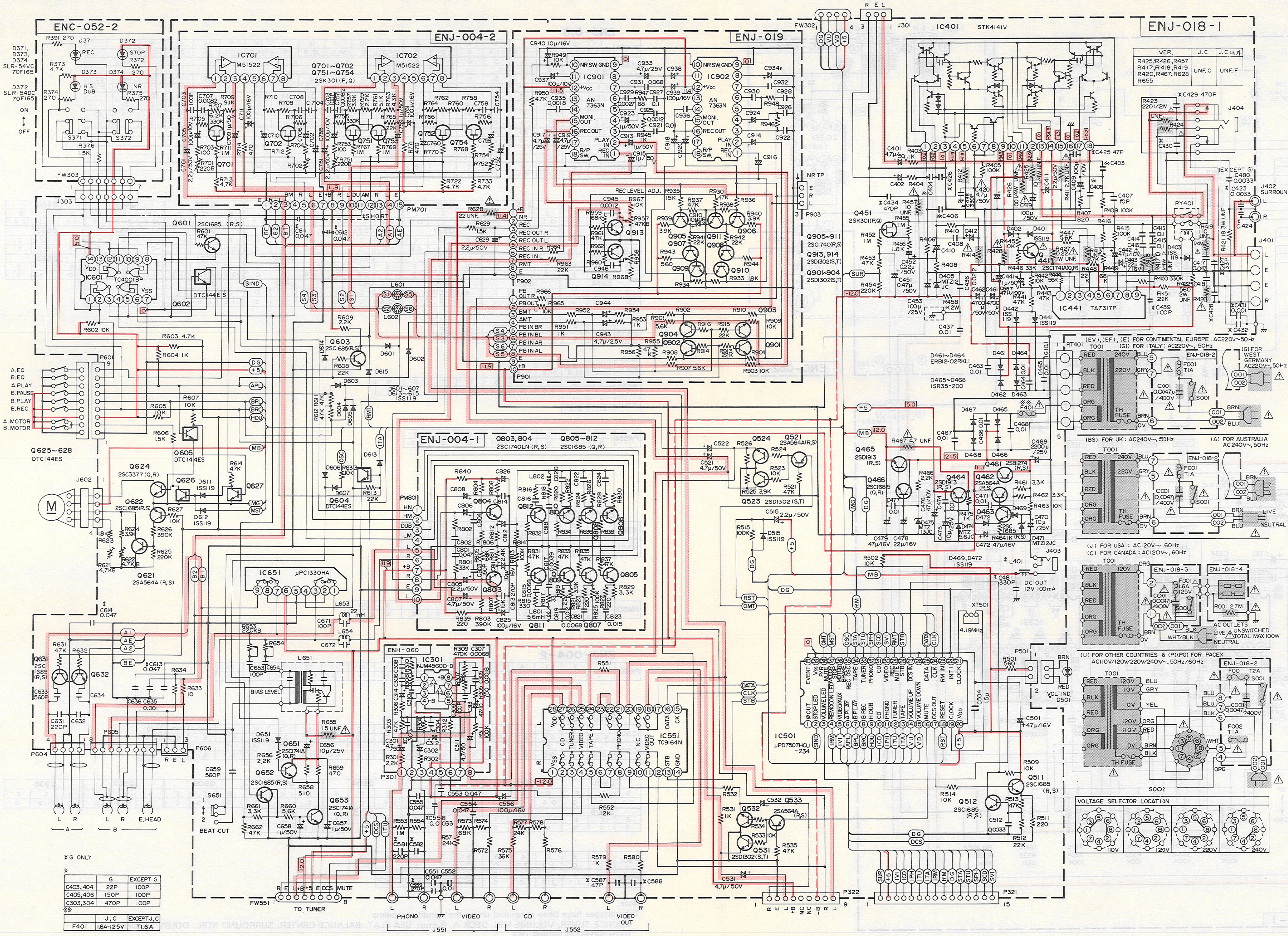
Q909			Q910			Q911			Q913			Q914		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0	0	0	0	0	0	0.6	0	0	0.6	0	0	0.6	0	0

P901	1	2	3	4	5	6	7	8	9	10
	0	0	2.3	3.9	0	0	0	0	0	11.9

P902	1	2	3	4	5	6	7	8	9
	11.4	0.1	2.7	0	0	0	0	3.3	0

Note:
The voltages have been measured under the conditions below.
SOURCE TUNER, VOLUME MIN, DECK A, B stop, SEA FLAT, BALANCE CENTER, SURROUND NOR., DOLBY NR OFF, HIGH SPEED DUBBING OFF

(3) Cassette & Power Amplifier Section


ENC-052-2
ENJ-004-2
ENJ-019
ENJ-018-1
ENJ-004-1
ENH-060
ENJ-018-2
ENJ-018-3
ENJ-018-4
IC701 M51522
IC702 M51522
Q701~Q702 2SK301(P,Q)
Q751~Q754
IC901 AN 7363N
IC902 AN 7363N
IC401 STK4141V
IC441 TA7317P
IC601 TC4011BP
IC651 μPC1330HA
IC301 NJM4560D-D
IC551 TC9164N
IC501 μPD7507HCU -234
Q905~911 2SC1740(R,S)
Q913,914 2SD1302(S,T)
Q901~904 2SD1302(S,T)
Q803,804 2SC1740LN (R,S)
Q805~812 2SC1685 (Q,R)
Q625~628 DTC144ES
REC LEVEL ADJ.
BIAS LEVEL
A.EQ
B.EQ
A.PLAY
B.PAUSE
B.PLAY
B.REC
A.MOTOR
B.MOTOR
L R E.HEAD
A B
BEAT CUT
TO TUNER
PHONO
VIDEO
CD
VIDEO OUT
J551
J552
J401
J402 SURROUND
J403
J404
DC OUT 12V 100mA
VOL IND D501
(EV),(EF),(E) FOR CONTINENTAL EUROPE : AC220V~50Hz
(G) FOR ITALY: AC220V~, 50Hz
(G) FOR WEST GERMANY AC220V~50Hz
(BS) FOR UK: AC240V~, 50Hz
(A) FOR AUSTRALIA AC240V~, 50Hz
(J) FOR USA : AC120V~, 60Hz
(C) FOR CANADA : AC120V~, 60Hz
(U) FOR OTHER COUNTRIES & (P)(PG) FOR PACEX AC110V/120V/220V/240V~, 50Hz/60Hz
AC OUTLETS UNSWITCHED TOTAL MAX 100W
LIVE
NEUTRAL
VOLTAGE SELECTOR LOCATION
110V 120V 220V 240V
TH FUSE
T001
S001
S002
RY401
XT501 4.19MHz

VER.	J.C	J.C 以外
R425;R426,R457 R417,R418,R419 R420,R467,R628 R655	UNF.C	UNF.F

✻G ONLY

※

	G	EXCEPT G
C403,404	22P	100P
C405,406	150P	100P
C303,304	470P	100P

※※

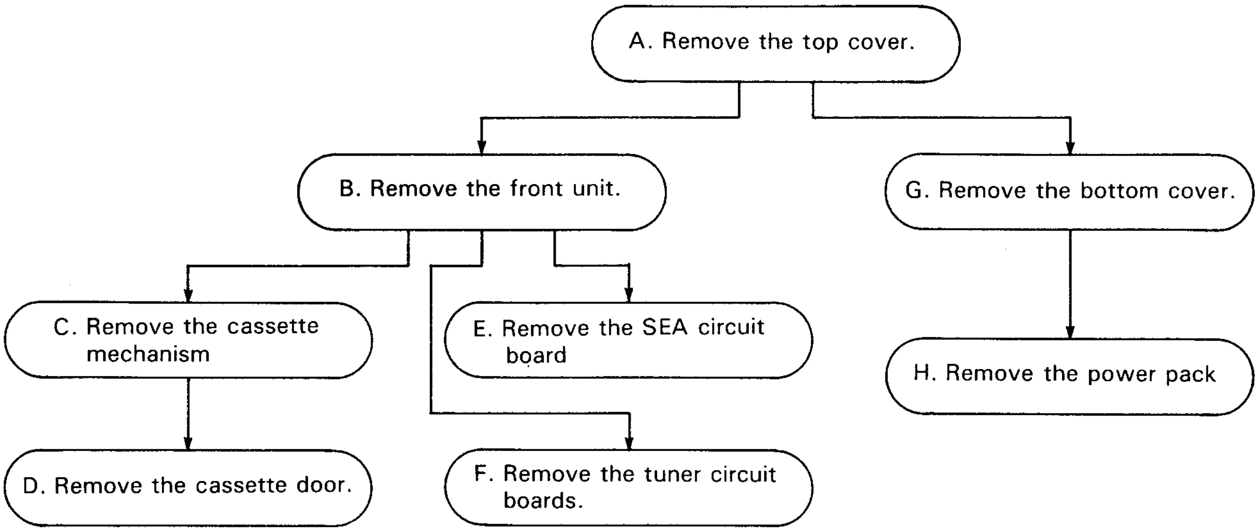
	J,C	EXCEPT J,C
F401	1.6A-125V	T1.6A

Notes:

1. ▬ shows DC voltage to the chassis with no signal input.
2. — indicates ±B power supply.
3. ▨ indicates signal path.
4. When replacing the parts in the darkned are (▬) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
The design and contents are subject to change without notice.

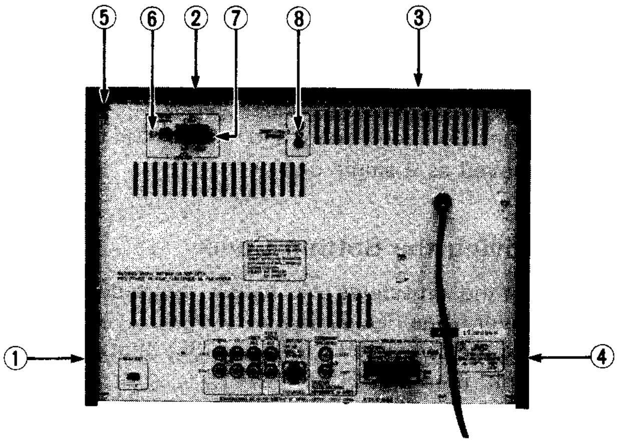
Removal Procedures

Perform disassembly of this device by following the flowchart below.


A. Remove the top cover.
B. Remove the front unit.
G. Remove the bottom cover.
C. Remove the cassette mechanism
E. Remove the SEA circuit board
H. Remove the power pack
D. Remove the cassette door.
F. Remove the tuner circuit boards.

A. Removing the Top Cover

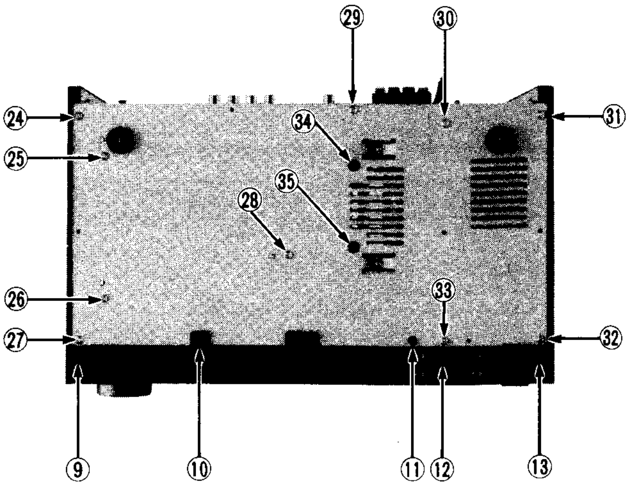
1. Remove the four screws at both sides of the device.
2. Remove the screws ① to ④ that secure the top cover at the rear of the device.



B. Removing the Front Unit

1. Remove the four screws ⑤ to ⑧ that secure the tuner section. (See Fig. 1)
2. Remove the five black screws ⑨ to ⑬ that secure the front panel. (See Fig. 2)
3. Disconnect the connector (A) from the tuner section (See Fig. 3)
4. Disconnect the four connectors that connect the audio circuit board and the cassette section.
5. Disconnect the connector and flat wire from the Motor drived volume.
6. Disconnect the two flat wires from the circuit boards secured to the front panel.
7. Remove the front unit by pulling it carefully toward you. At this time, take care not to bend the pins of connectors Ⓑ and Ⓒ shown in Fig. 5.

   Note: When inserting connectors Ⓑ and Ⓒ in their mating connectors on the SEA circuit board, make sure they are properly aligned as you insert them.


㉙
㉚
㉔
㉛
㉞
㉕
㉟
㉘
㉖
㉝
㉗
㉜
⑨
⑩
⑪
⑫
⑬

C. Removing the Cassette Mechanism

1. Remove the five screws ⑭ to ⑱ that secure the cassette mechanism. (See Fig. 4)
2. Press the EJECT button to open the cassette door, then remove the cassette mechanism.

   Note: Screws ⑭ to ⑯ are special double-thread screws used for mounting plastic parts.
   Screws ⑰ and ⑱ are ordinary machine screws.

D. Removing the Cassette Door

1. Remove the gear oil dumpter unit (which is secured by two screws).
2. Remove the cassette spring from the holder bracket.
3. Remove the holder bracket (which is secured by a screw), then remove the cassette door.

E. Removing the SEA Circuit Board

1. Remove the two screws ⑲ and ⑳ , then remove the POWER button holder. (See Fig. 4)
2. Remove the three screws ㉑ to ㉓ that secure the SEA circuit board. (See Fig. 4)

   Note: Screws ⑲ and ㉒ are special double-thread screws used for mounting plastic parts.
   Screws ⑳ , ㉑ and ㉓ are ordinary tapping screws.

F. Removing the Tuner Circuit Boards

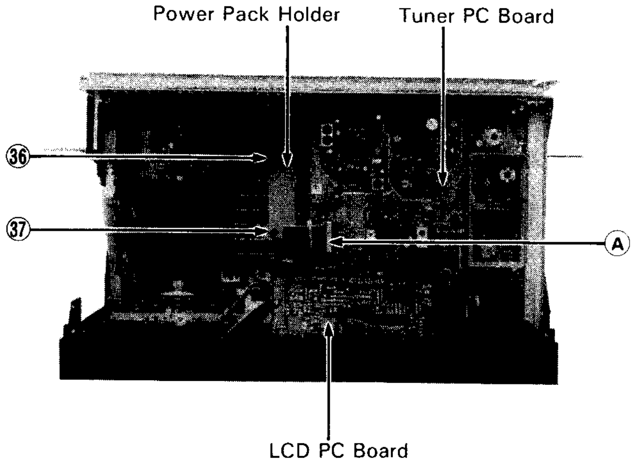
1. Release the tuner control circuit board from the hooks of the front panel. (See Fig. 4)
2. Remove the tuner preset circuit board from the hooks of the front panel. (See Fig. 4)
3. Remove the bracket that supports the LCD circuit board. (This bracket is secured by two screws.)
4. Now, the LCD circuit board and tuner circuit boards can be removed as a single unit.

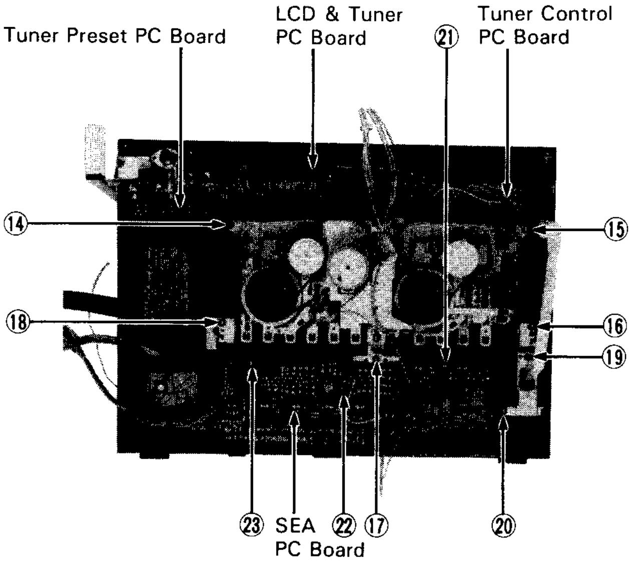
G. Removing the Bottom Cover

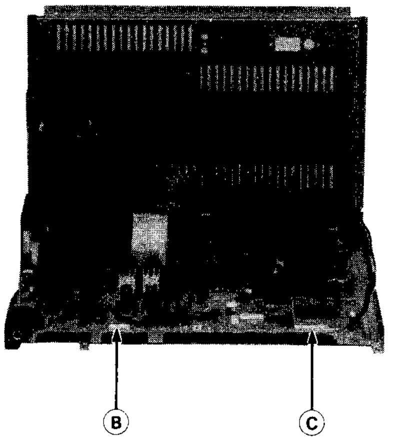
1. Remove the ten screws ㉔ to ㉝ that secure the bottom cover. (See Fig. 2)
2. Remove the two screws ㉞ and ㉟ that secure the heat sink. (See Fig. 2)
3. Remove the two black screws ⑩ and ⑪ that secure the front panel, then remove the front panel. (See Fig. 2)

H. Removing the Power Pack

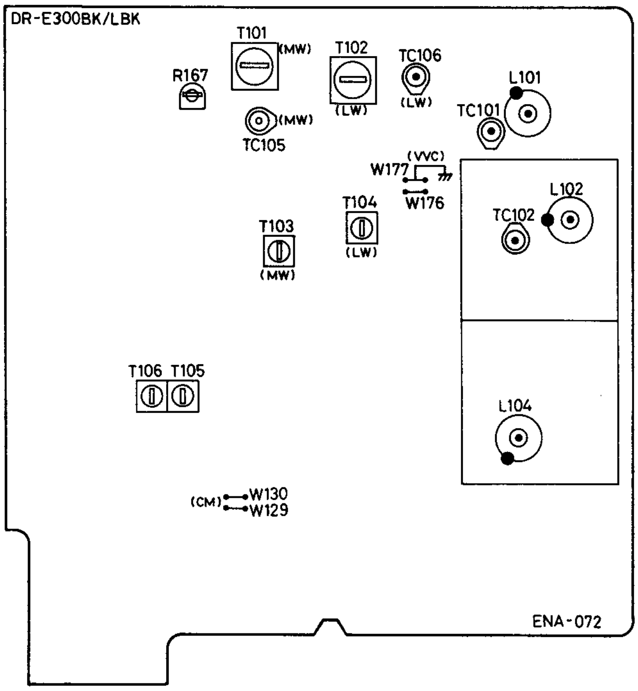
1. Remove the bracket that secures the power pack. (This bracket is secured by screws ㊱ and ㊲ shown in Fig. 3).
2. From the pattern side of the audio circuit board, remove the solder of the power pack.







FM/MW/LW Tuner Alignment Procedures



3-(1) Front-end Section

FM oscillator coil : L104

1. Set the frequency display to "108.0 MHz" and the FM MODE switch to "MONO" position.

2. Confirm that there is noise with no input signal.

3. Adjust L104 so that the output of test point "W176 and W177" becomes 8.3 V ± 0.1 V.

4. Set the frequency display to "87.5 MHz" and confirm that the output of test point "W176 and W177" is 1.9 V ± 0.5 V.

FM antenna coil : L101, L102

5. Adjust L101 and L102 to obtain maximum sensitivity at 89.9 MHz.

FM antenna trimmer : TC101, TC102

6. Adjust TC101 and TC102 to obtain maximum sensitivity at 105.9 MHz.

Note : After adjustment, confirm that the "Band Cover" is in the following range (for West Germany only).

Lower edge : 87.5 MHz (+ 0 kHz, -300 kHz)
Higher edge : 108.0 MHz (+500kHz, - 0 kHz)

3-(2) IF, Detection and MPX

FM detector coil : T105, T106

1. Connect a center-meter or a digital voltmeter to test point "W129 and W130", and tune to a 100.1 MHz signal (1kHz modulation, 75kHz or 40kHz deviation) with SSG ATT 70dB.

2. Adjust T105 so that the center-meter indicates "0" or the digital voltmeter reads 0 mV.

3. At the same time, adjust T106 so that the distortion of the audio output is minimized.

Stereo Separation : R167 (for Continental Europe, West Germany, Italy and the U.K.)

1. Tune to a 98.1 MHz stereo signal.

2. Adjust R167 so that the channel separation becomes maximum.

3-(3) LW Section (for Europe only)

LW oscillator coil : T104

1. Set the frequency display to 144 kHz.

2. Adjust T104 to obtain 0.8 V at test point "W176 and W177".

3. Set the frequency display to 353 kHz and confirm that the output of test point "W176 and W177" is 7.7 V ± 0.5 V.

In case of Italy

1. Set the frequency display to 144 kHz.

2. Adjust T104 to obtain 1.0 V at test point "W176 and W177".

3. Set the frequency display to 290 kHz and confirm that the output of test point "W176 and W177" is 5.2 V ± 0.3 V.

LW antenna coil : T102

4. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.

5. Adjust T102 to obtain the best reception sensitivity at 164 kHz.

LW antenna trimmer : TC106

6. Adjust TC106 to obtain the best receiving sensitivity on 353 kHz.

In case of Italy

6. Adjust TC106 to obtain the best reception sensitivity at 245 kHz.

3-(4) MW Section

Note : ( ) ; 9 kHz step, [ ] ; 10 kHz step

MW oscillator coil : T103

1. Set the frequency display to (522 kHz) [530 kHz] and confirm that the output of test point "W176 and W177" is (0.9 V ± 0.2 V) [0.9 V ± 0.2 V] .

2. Set the frequency display to (1629 kHz) [1630 kHz or 1710 kHz] and confirm that the output of test point "W176 and W177" is (7.5 V ± 0.8 V) [7.5 V ± 0.8 V or 8.0 V ± 0.8 V] .

In case of Saudi Arabia and Italy

1. Set the frequency display to 531 kHz and confirm that the output of test point "W176 and W177" is 1.2 V ± 0.35 V.

2. Set the frequency display to 1602 kHz and confirm that the output of test point "W176 and W177" is 7.2 V ± 0.7 V.

3. If its output is over 9 V at [1710 kHz] , adjust T103 to obtain [9.0 V] .

MW antenna coil : T101

4. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.

5. Adjust T101 to obtain the best reception sensitivity at (603 kHz) [600 kHz] .

MW antenna trimmer : TC105

6. Adjust TC105 to obtain the best reception sensitivity at (1404 kHz) [1400 kHz] .

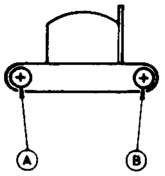
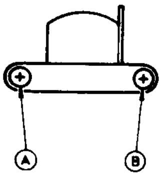
Cassette Deck Adjustment Procedures

(1) Measuring Instruments Required for Adjustment

1. Audio frequency signal generator (0 dBs output at the 600 Ω output terminal from 50 Hz to 20 kHz)
2. Attenuator (600 Ω impedance)
3. Electronic voltmeter
4. Standard tapes
   VTT-703L (head azimuth adjustment)
   VTT-712 (tape speed, wow & flutter measurement)
   VTT-738 (playback frequency adjustment)
   VTT-724 (reference level)
5. Recording standard tapes
   TS-5 (SF), TS-7 (metal) or equivalent, (Use JVC standard tapes.)
6. 600 Ω resisters (for attenuator matching)
7. Distortion meter (band-pass filter)
8. Torque gauge (cassette) CTG-N } For mechanical adjustments
9. C-120 tape (to check tape travel) } For mechanical adjustments

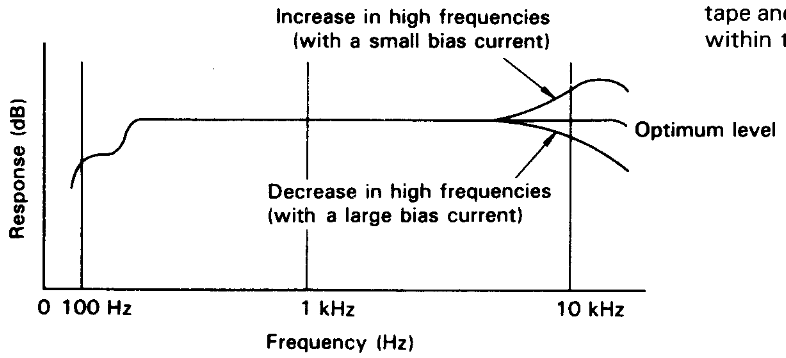
(2) Mechanical Adjustments and Repairs

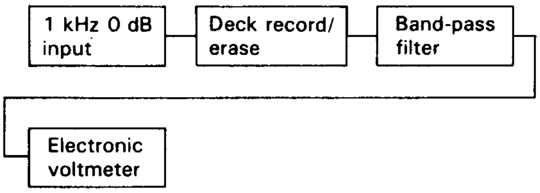
(Adjust and inspect the mechanical system before making electrical circuit adjustments)

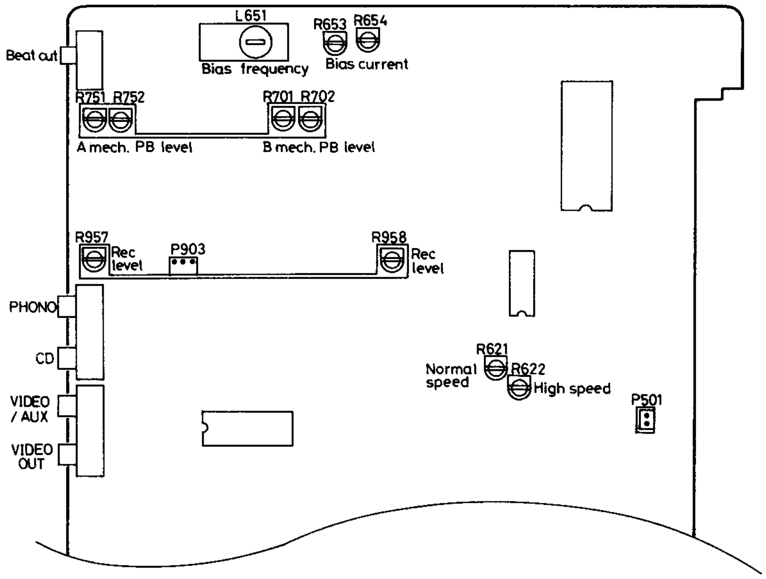
Item	Adjustment Method	Adjustment Location	Standard Value	Remarks
Recording/ playback head azimuth adjustment	1.Connect the SPK OUT terminal output to an electronic voltmeter. 2.Play VTT-703L.			1. Replace the head when it does not deliver the required performance due to wear, disconnection, excessive magnetization, etc. After replacement, adjust the head azimuth. Also adjust the playback level, recording bias current, recording level, etc. 2. Replace the head when the left and right output level differ by more 3~4 dB to avoid claims.
A mechanism 	3.Put the deck in the PLAY ►mode and adjust screw Ⓐ until the output of the electronic voltmeter is maximum.	Screw Ⓐ	Maximum	
B mechanism 	4.Put the deck in the PLAY ► mode and adjust screw Ⓐ until the output of the electronic voltmeter is maximum.	Screw Ⓐ	Maximum	
	5.After making the adjustment, apply screw lock to prevent screws Ⓐ , Ⓑ coming loose.			
Playback torque	Use cassette CTG-N to measure the playback torque.		35~75 g-cm	When the standard torque cannot be obtained, clean or replace the take-up disk assembly.
Fast forward torque	Measure the fast forward torque, using the above method.		60 g-cm or more	When the standard torque cannot be obtained: 1. Clean the outer circumference of the capstan belt, motor pulley, flywheel, etc. 2. Replace the belt, idler, etc.
Rewind torque	Measure the rewind torque, using the above method.		60 g-cm or more	When the standard torque cannot be obtained, clean the outer circumference of the capstan belt, motor pulley, flywheel, supply reel disk, etc.
Wow & flutter	Playback VTT-712 with a wow & flutter meter connected to the SPK OUT terminal to make sure the wow & flutter is 0.28% (WRMS) or less.			When fluctuation is 0.1% or more even though within the rated value, repair to avoid a possible second claim.

(3) Electrical Circuit Adjustments

* Make the following adjustments after adjusting the head azimuth.
* In principle, the adjustments should be made in the following sequence.
* Set the NR switch to OFF and the BEAT CUT switch to "1".
* Adjustments marked with an asterisk (*) should always be made after the head is replaced.

Item		Adjustment Method	Adjustment Location	Standard Value	Remarks
Motor speed		1. Playback VTT-712 with the deck set to TAPE and an electronic counter connected to the SPK OUT terminal.	Semi-fixed resistor of the audio PC board		Connect a wow & flutter meter with a built-in electronic counter to the INPUT.
		2. Normal speed Adjustment 1) Mechanism B adj.: Play back deck B and adjust the semi-fixed resistor R621 by turning it so that the reading of meter is 3,000 Hz.	R621	3,000 Hz	
		3. Double-speed adjustment 1) Mechanism A adj.: Play back deck A and adjust the semi-fixed resistor R622 by turning it so that the reading of meter is 6,000 Hz.	R622	6,000 Hz	
* 1	Playback level	Playback VTT-724 (1 kHz) and adjust so that the output between ①, ③ (L) of P903 and ① and ② (R) of P903 is −3 dB.	A (L) R751 (R) R752 B (L) R701 (R) R702	−3 dBs	The playback level varies when the head is replaced so should be adjusted. Use an electronic voltmeter with an impedance of 100 kΩ or more.
* 2	Recording bias frequency	Connect a frequency counter between ① and ② of P501 and playback a metal tape.	L651	105 kHz ±5 kHz	
* 3	Recording frequency response	Record 100 Hz/1 kHz/10 kHz with the NR switch off and −30 dBs input from AUX. While playing back these recorded signals, adjust the variation of the 100 Hz and 10 kHz outputs from the 1 kHz output to the standard value using R653 and R654. (Basically, adjust so that the 1 kHz and 10 kHz outputs are flat.)	R653 (L) R654 (R)	0±3 dB for 100 Hz and 10 kHz with 1 kHz as the standard.	1) The recording and playback frequencies of a cassette deck are adjusted by adjusting the bias. This is because the frequency response depends more on the bias current than with an open-reel deck. 2) When the bias current is not correctly adjusted, recording and playback become as shown in the diagram below. 3) Perform the adjustment with normal tape and confirm that the values are within the range for metal tape.
		 **Note:** After completing the recording level adjustment in item (4), check the recording and playback frequencies with the NR switch on. Fine adjust again if the value is 0±4 dB or more at 1 kHz and 10 kHz.			

	Item	Adjustment Method	Adjustment Location	Standard Value	Remarks
* 4	Recording Level	1) Add a 1 kHz (−8 dB) input to the AUX terminal and record on the left and right channels using normal tape. 2) When playing this back, adjust the recording signal current so that output between ① – ③ (L) of P903 and ① – ② (R) of P903 is −3 dB.	R957 (L) R958 (R)	−3 dBs	Adjust with normal tape and make sure that the level difference is 1.5 dB or less with metal tape and that the left/right level difference is 1.0 dB or less.
* 5	Recording/ playback distortion check	1) Record a 1 kHz (−8 dBs) AUX input signal. 2) Play this back and check the output with a distortion meter to make sure it is the rated value.		2% or less with normal tape or metal tape.	Perform after the bias current and recording level adjustments.
6	Recording/ playback S/N ratio check	1) Record 1 kHz (−8 dB) AUX input signal. While recording, remove the input and record without a signal. 2) Play this back and use an electronic voltmeter to compare the 0 dB recording output and the output of the recording without a signal to make sure this is the rated value.		44 dB or more with normal tape or metal tape	
7	Erase ratio check	1) Record a 1 kHz (0 dB) AUX input signal. 2) Rewind and erase part of the recorded section. 3) Compare the outputs of the recorded and erased sections using an electronic voltmeter.		65 dB or more	Connect a 1 kHz band-pass filter between the deck and electronic voltmeter when making the adjustment.  1 kHz 0 dB input Deck record/ erase Band-pass filter Electronic voltmeter
8	Auto-stop check	When playing back and recording, make sure to operate AUTO STOP.			


L651
R653 R654
Beat out
Bias frequency
Bias current
R751 R752
R701 R702
A mech. PB level
B mech. PB level
R957
Rec level
P903
R958
Rec level
PHONO
CD
VIDEO /AUX
VIDEO OUT
R621
Normal speed
R622
High speed
P501

Troubleshooting the Cassette Amplifier P.C. Board

There are three types of small P.C. Boards (cassette modules) installed vertically on the cassette amplifier P.C. Board (ENJ-010-1).

1. Recording amplifier P.C. Board (ENJ-004H-1)
2. Playback amplifier P.C. Board (ENJ-004H-2)
3. Noise Reduction P.C. Board (ENJ-019A)

(1) Before replacing the parts in the cassette module, check the various terminals

1. Recording amplifier P.C. Board (ENJ-004H-1)

Details of defect	Check Item	Check Point
When recording is impossible (in any mode)	Is the power supplied?	P801 ⑦⑨
	Is recording bias applied?	P801 ⑤⑥
	Is the recording signal present?	P801 ⑧⑩
When the recording/ playback frequency characteristics are defective	Are the playback frequency characteristics normal?	to playback module

2. Playback amplifier P.C. Board (ENJ-004H-2)

Details of defect	Check Item	Check Point
When the recording/ playback frequency characteristics are defective	Is the recording equalizer switch input normal?	P701 ①②③④
When playback is impossible	Is the power supplied?	P701 ⑦⑧
	Is the head wire cut?	P701 ②③⑬⑭
	Is there any output?	P701 ⑤⑥⑨⑩
When the playback frequency characteristics are defective	Is the playback equalizer switch input normal?	P701 ④⑪ ⑫

3. NR P.C. Board (ENJ-019A)

Details of defect	Check Item	Check Point
When recording is impossible	Is the recording signal present?	P902 ⑥⑦
	Is there any output?	P902 ④⑤
Details of defect	Check item	Check point
When recording is impossible	Is REC selection normal?	P902 ③
When playback is impossible	Is the power supplied?	P901 ⑩, P902 ①
	Is the playback signal present?	P901 ⑤⑥⑦⑧
	Is A/B signal selection normal?	P901 ③④
	Is REC selection normal?	P902 ③
	Is there any output?	P901 ①②
When NR is not effective	Is NR control normal?	P902 ②
When ALC is not effective	Is ALC inhibit control normal?	P902 ⑧
When monitoring is impossible in the dubbing mode	Is the playback signal present?	P901 ⑦⑧
	Is there any output?	P901 ①②

(2) Determine which module is faulty using the results of the above checks. The applications for which semiconductors used on the P.C. Boards are used are shown below.

1. Recording amplifier P.C. Board

Use	L	R	Remarks
Signal amplifier	Q801, Q803	Q802, Q804	2SC458(D)
High speed normal EQ switch	Q809	Q810	2SC1685(Q,R)
High speed metal EQ switch	Q811	Q812	2SC1685(Q,R)
Low speed normal EQ switch	Q805	Q806	2SC1685(Q,R)
Low speed metal EQ switch	Q807	Q808	2SC1685(Q,R)

2. Playback amplifier P.C. Board

Use	L	R	Remarks
Signal amplifier B/A mechanism	IC701, IC702	IC701, IC702	M51522L
B mechanism metal EQ switch	Q701	Q702	2SK301(P,Q)
A mechanism metal EQ switch	Q751	Q752	2SK301(P,Q)
A mechanism double--speed EQ switch	Q753	Q754	2SK301 (P,Q)

3. NR P.C. Board

Use	L	R	Remarks
Deck A/B signal selection	Q901, Q903	Q902 Q904	2SD1302(S,T)
Rec Mute	Q913	Q914	2SD1302(S,T)
ALC	Q905, Q907 Q909	Q906, Q908 Q910	2SC1740(R,S)
ALC inhibit	Q911	------	2SC1740(R,S)
REC/PB NR	IC903	IC904	AN7363N

(3) The input/output and control conditions for the P.C. Boards are as follows.

1. Recording amplifier P.C. Board (ENJ-004H-1)

Pin No.	Pin Function	Remarks
1	High speed normal EQ	Electronic switch input 5 V
2	High speed metal EQ	Electronic switch input 5 V
3	Low speed normal EQ	Electronic switch input 5 V
4	Low speed metal EQ	Electronic switch input 5 V
5	R channel signal output	
6	L channel signal output	
7	+B	+12 V
8	L channel signal input	
9	GND	
10	R channel signal input	

Gain

Control		①, ②, ③, ④ Open	5 V for only ①	5 V for only ②	5 V for only ③	5 V for only ④
in ⑩	100 Hz	−8.7 dB ± 1.5 dB	−8.5 dB ± 1.5 dB	−5.1 dB ± 1.5 dB	−9.7 dB ± 1.5 dB	−5.1 dB ± 1.5 dB
	1 kHz	−9.7 dB ± 1.5 dB	−9.5 dB ± 1.5 dB	−6.1 dB ± 1.5 dB	−9.6 dB ± 1.5 dB	−6.0 dB ± 1.5 dB
out ⑤	10 kHz	−8.6 dB ± 1.5 dB	−7.5 dB ± 1.5 dB	−2.6 dB ± 1.5 dB	−2.8 dB ± 1.5 dB	−3.0 dB ± 1.5 dB
in ⑧	100 Hz	−8.7 dB ± 1.5 dB	−8.5 dB ± 1.5 dB	−5.1 dB ± 1.5 dB	−9.7 dB ± 1.5 dB	−5.1 dB ± 1.5 dB
	1 kHz	−9.7 dB ± 1.5 dB	−9.5 dB ± 1.5 dB	−6.1 dB ± 1.5 dB	−9.6 dB ± 1.5 dB	−6.0 dB ± 1.5 dB
out ⑥	10 kHz	−8.6 dB ± 1.5 dB	−7.5 dB ± 1.5 dB	−2.6 dB ± 1.5 dB	−2.8 dB ± 1.5 dB	−3.0 dB ± 1.5 dB

Note: (1) 10 kohms should be inserted in series for the signal source of the input terminals.
(2) The standard output voltage should be −20 dBs and the load impedance of the output terminals should be 1 kohm.

2. Playback amplifier P.C. Board (ENJ-004H-2)

Pin No.	Pin Function	Remarks
1	GND	For B mechanism input
2	R Channel head input for mechanism B	
3	L Channel head input for A mechanism B	
4	Normal EQ for mechanism B	Electronic switch input (GND short-circuited)
5	R Channel EQ output for mechanism B	
6	L Channel EQ output for mechanism B	
7	GND	For power supply
8	+B	12 V
9	R Channel EQ output for mechanism A	
10	L Channel EQ output for mechanism A	
11	Low speed EQ mechanism A	Electronic switch input (GND short-circuited)
12	Normal EQ for mechanism A	Electronic switch input (GND short-circuited)
13	R Channel head input for mechanism A	
14	L Channel head input for mechanism A	
15	GND	For A mechanism input

Gain

Control		⑪, ⑫ Open	⑪ Open, ⑫ GND	⑪ GND, ⑫ Open	⑪, ⑫ GND
in ⑬	100 Hz	57.0 dB ± 2 dB	-----	-----	-----
	1 kHz	39.0 dB ± 2 dB	-----	-----	-----
out ⑨	10 kHz	27.0 dB ± 2 dB	31.0 dB ± 2 dB	32.0 dB ± 2 dB	37.0 dB ± 2 dB
in ⑭	100 Hz	57.0 dB ± 2 dB	-----	-----	-----
	1 kHz	39.0 dB ± 2 dB	-----	-----	-----
out ⑩	10 kHz	27.0 dB ± 2 dB	31.0 dB ± 2 dB	32.0 dB ± 2 dB	37.0 dB ± 2 dB

Control		④ Open	④ GND
in ②	100 Hz	57.0 dB ± 2 dB	-----
	1 kHz	40.0 dB ± 2 dB	-----
out ⑤	10 kHz	32.0 dB ± 2 dB	37.0 dB ± 2 dB
in ③	100 Hz	57.0 dB ± 2 dB	-----
	1 kHz	40.0 dB ± 2 dB	-----
out ⑥	10 kHz	32.0 dB ± 2 dB	37.0 dB ± 2 dB

Notes: (1) The standard output voltage should be −20 dBs and the load impedance of the output terminals should be 10 kohms.
(2) The control for adjustment should be preset to the center.

* Reference value ... the variable range of the control for adjustment is about 11 dB.

3. Noise Reduction P.C. Board (ENJ-019A)

P901

Pin No.	Function name	Remarks
1	MON OUT R	Playback output
2	MON OUT L	Playback output
3	B MUTE	B muting with +B short-circuited
4	A MUTE	A muting with +B short-circuited
5	B IN R	B mechanism playback input (1 kHz)
6	B IN L	B mechanism playback input (1 kHz)
7	A IN R	A mechanism playback input (400 Hz)
8	A IN L	A mechanism playback input (400 Hz)
9	GND	Earth
10	+B	+12 V

P902

Pin No.	Function name	Remarks
1	+B	+12 V
2	NR SW	NR OFF with GND short-circuited
3	NR REC SW	REC with GND short-circuited
4	REC OUT R	Recording output
5	REC OUT L	Recording outout
6	REC IN R	Recording input (1 kHz)
7	REC IN L	Recording input (1 kHz)
8	REC MUTE	ALC OFF with +B short-circuited
9	GND	Earth

Gain

Mode	Measurement point		Gain	Remarks
1	Output	L P901 ①	Input of P901 ⑤ and ⑥ 13.0 ± 2 dB	Output of 1 kHz
		R P901 ②		
2	Output	L P901 ①	Input of P901 ⑦ and ⑧ 13.0 ± 2 dB	Output of 400 Hz
		R P901 ②		
3	Output	L P902 ④	Input of P902 ⑦ and ⑧ 8 ± 2 dB	Output of 1 kHz
		R P902 ④		

Note: The standard output voltage should be −20 dBs and the load impedance of the output terminals should be 22 kohms.

Mode setting

Mode	A MUTE	B MUTE	NR REC SW	REC MUTE	NR SW
	P901 ④	P901 ③	P902 ③	P902 ⑧	②
1 (B playback)	+B	GND	OPEN	+B	GND
2 (A playback)	GND	+B	OPEN	+B	GND
3 (A play B Rec)	GND	+B	GND	+B	GND
4 ALC	GND	+B	GND	+B	GND
5 (DUBBING)	GND	+B	OPEN	+B	OPEN
6 (NR ON)	GND	+B	GND	+B	OPEN

Connector terminal function between ENJ-018 and ENC-052

P321

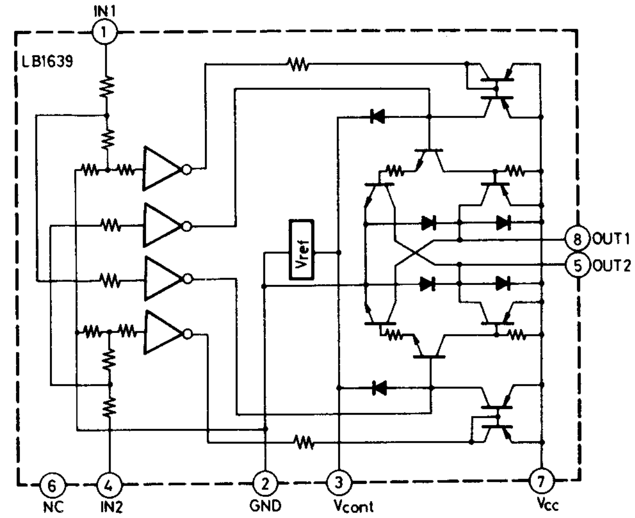
Pin No.	Name	Terminal Function
1	SURROUND	5 V output with surround SW on
2	+B	5 V
3	VIDEO/AUX INDICATOR	Lights at L
4	CD INDICATOR	Lights at L
5	PHONO INDICATOR	Lights at L
6	TUNER INDICATOR	Lights at L
7	TAPE INDICATOR	Lights at L
8	REMOCON INDICATOR	Lights at L
9	REMOCON OUT	Remote control data output
10	DIGITAL GND	
11	TAPE SW	H output with SW on
12	TUNER SW	H output with SW on
13	PHONE SW	H output with SW on
14	CD SW	H output with SW on
15	VIDEO/AUX SW	H output with SW on

P322

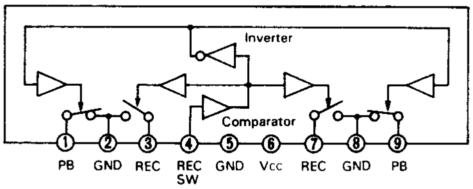
Pin No.	Name	Terminal Function
1	SEA IN Rch	SIGNAL IN Rch
2	GND	
3	SEA IN Lch	SIGNAL IN Lch
4	+B	+12 V
5	NC	
6	NC	
7	−B	−12 V
8	SEA OUT Rch	SIGNAL OUT Rch
9	SEA OUT Lch	SIGNAL OUT Lch

Internal Block Diagrams of Major ICs

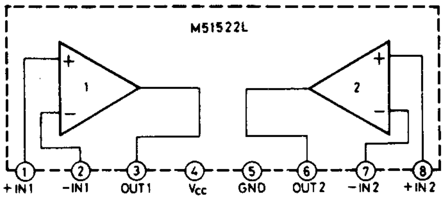
IC361: LB1639 (Motor drive)


IN1
1
LB1639
Vref
8 OUT1
5 OUT2
6
NC
4
IN2
2
GND
3
Vcont
7
Vcc

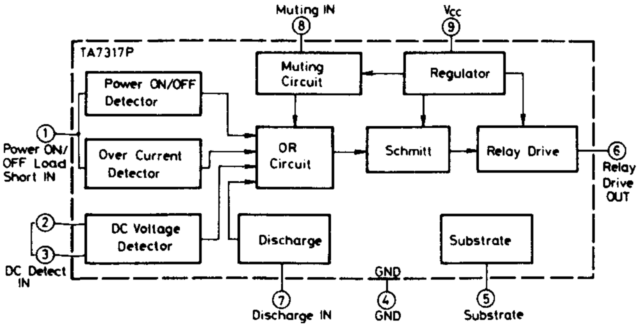
IC651: μPC1330HA (Head Switch)


Inverter
Comparator
1
PB
2
GND
3
REC
4
REC SW
5
GND
6
Vcc
7
REC
8
GND
9
PB

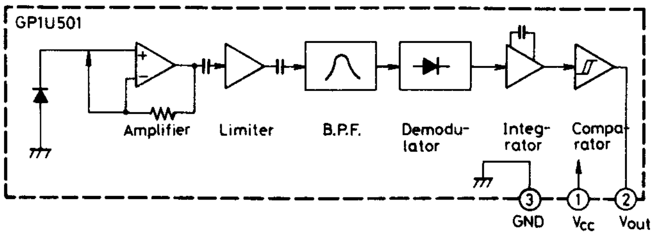
IC701, IC702: M51522L (Dual OP amp.)


M51522L
1
2
1
+IN1
2
−IN1
3
OUT1
4
Vcc
5
GND
6
OUT2
7
−IN2
8
+IN2

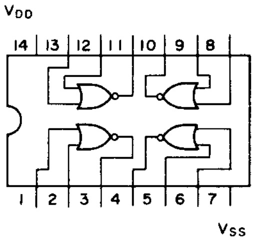
IC441: TA7317P (Protector)


Muting IN
8
Vcc
9
TA7317P
Power ON/OFF Detector
Muting Circuit
Regulator
1
Power ON/ OFF Load Short IN
Over Current Detector
OR Circuit
Schmitt
Relay Drive
6
Relay Drive OUT
2
3
DC Detect IN
DC Voltage Detector
Discharge
Substrate
GND
7
Discharge IN
4
GND
5
Substrate

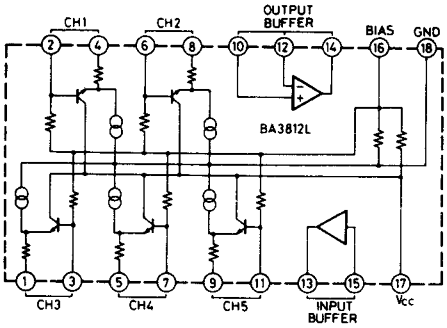
IC321: GP1U501 (Remote-control Receiver)


GP1U501
Amplifier
Limiter
B.P.F.
Demodu-lator
Integ-rator
Compa-rator
3
GND
1
Vcc
2
Vout

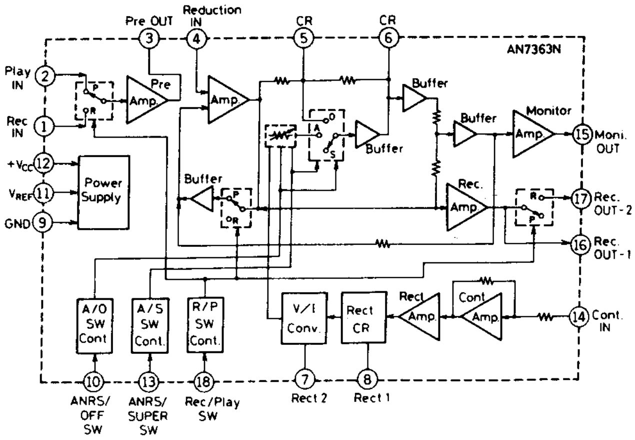
IC601: TC4001BP (C-MOS NOR GATE)


VDD
14
13
12
11
10
9
8
1
2
3
4
5
6
7
VSS

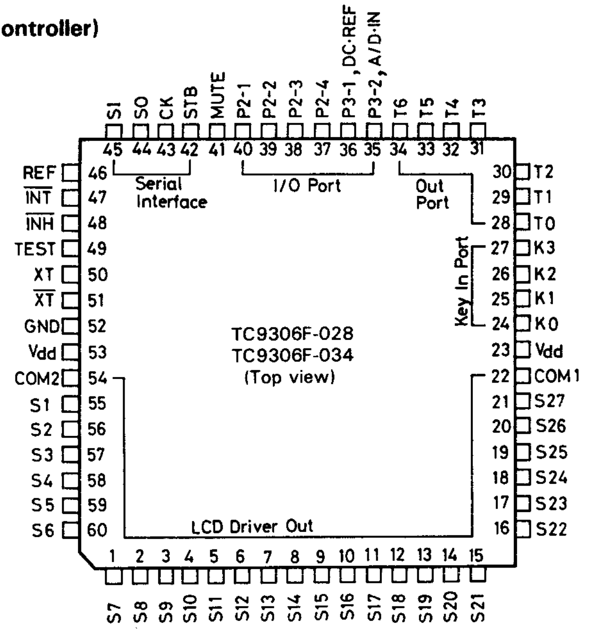
IC331, IC332; BA3812L (SEA amplifier)


CH1
CH2
OUTPUT BUFFER
BIAS
GND
2
4
6
8
10
12
14
16
18
BA3812L
1
3
5
7
9
11
13
15
17
CH3
CH4
CH5
INPUT BUFFER
Vcc

IC901, IC902: AN7363N (Noise Reduction amplifier)


Pre OUT
3
Reduction IN
4
CR
5
CR
6
AN7363N
Play IN
2
Rec IN
1
P
OR
Pre Amp.
Amp.
Buffer
A
O
S
Buffer
Buffer
Monitor Amp.
15
Moni. OUT
+Vcc
12
VREF
11
GND
9
Power Supply
Buffer
P
OR
Rec. Amp.
R
P
17
Rec. OUT-2
16
Rec. OUT-1
A/O SW Cont
A/S SW Cont.
R/P SW Cont.
V/I Conv.
Rect CR
Rect Amp.
Cont Amp.
14
Cont. IN
10
ANRS/ OFF SW
13
ANRS/ SUPER SW
18
Rec/Play SW
7
Rect 2
8
Rect 1

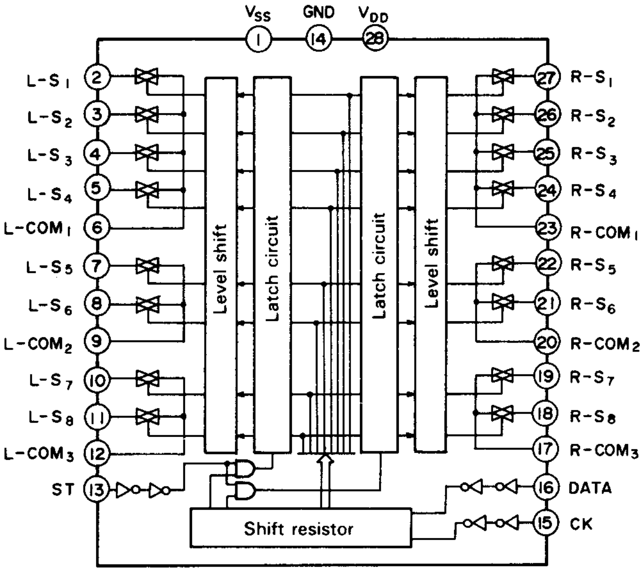
IC101 : TC9306F-028 (System Controller)
or
TC9306F-034


S1 SO CK STB MUTE P2-1 P2-2 P2-3 P2-4 P3-1, DC·REF P3-2, A/D·IN T6 T5 T4 T3
45 44 43 42 41 40 39 38 37 36 35 34 33 32 31
Serial Interface
I/O Port
Out Port
REF 46
$\overline{\text{INT}}$ 47
$\overline{\text{INH}}$ 48
TEST 49
XT 50
$\overline{\text{XT}}$ 51
GND 52
Vdd 53
COM2 54
S1 55
S2 56
S3 57
S4 58
S5 59
S6 60
30 T2
29 T1
28 T0
27 K3
26 K2
25 K1
24 K0
23 Vdd
22 COM1
21 S27
20 S26
19 S25
18 S24
17 S23
16 S22
Key In Port
TC9306F-028
TC9306F-034
(Top view)
LCD Driver Out
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21

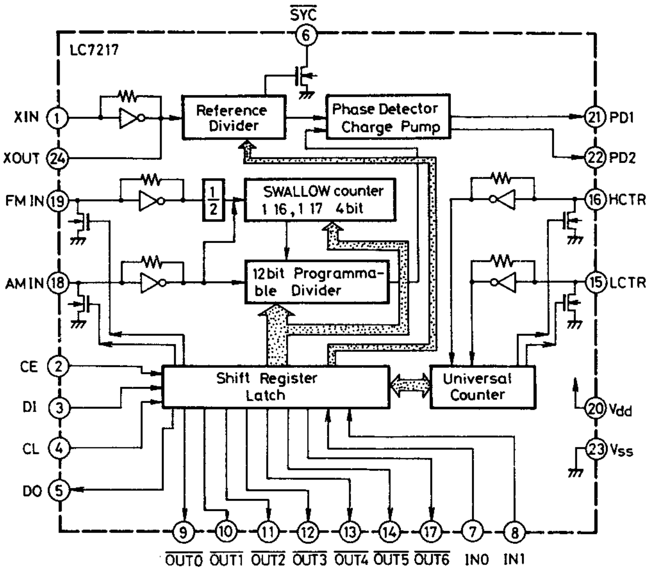
IC101 : TC9306F-028 or TC9306F-034

Pin No.	Symbol	Name	I/O	Terminal Function
55~60 1~21	SEG.1~ ~SEG.27	Segment1~ ~Segment27	O	Drive the LCD segment.
22	COM 1	Common 1	O	Drive the common 1 of the LCD.
54	COM 2	Common 2	O	Drive the common 2 of the LCD.
24	K0	Key in 0	I	Key input
25	K1	Key in 1	I	Key input
26	K2	Key in 2	I	Key input
27	K3	Key in 3	I	Key input
28	T0	Key out 0	O	Key output
29	T1	Key out 1	O	Key output
30	T2	Key out 2	O	Key output
31	T3	Key out 3	O	Key output
32	T4	Key out 4	O	Key output
33	T5	Key out 5	O	Key output
34	T6	Key out 6	O	Key output
35	A/D IN	A/D input or $\overline{\text{TUNED}}$ input	I	Input for signal meter or input for TUNED indicator
36	DC REF.	DC reference	I	Reference voltage for A/D
37	P2-4	Key out 7	O	Key output
38	P2-3	DCS IN	I	Input for Direct Call System
39	P2-2	DCS OUT	O	Output for Direct Call System
40	P2-1	$\overline{\text{STEREO}}$ IN	I	Input for stereo indicator
41	MUTE	MUTE	O	"H" output when muting is turned ON.
42	STB	STB	O	Serial Data Bus (Connect to LC7217.)
43	CK	CK	O	Serial Data Bus (Connect to LC7217.)
44	SO	SO	O	Serial Data Bus (Connect to LC7217.)
45	SI	SI	I	Serial Data Bus (Connect to LC7217.)
46	$\overline{\text{REF}}$	$\overline{\text{REF}}$	O	Output for PLL reference frequency
47	$\overline{\text{INT}}$	$\overline{\text{INT}}$	I	Initialized at "L" level
48	$\overline{\text{INH}}$	$\overline{\text{INH}}$	I	State of inhibit at "L" level
49	$\overline{\text{TEST}}$	$\overline{\text{TEST}}$	---	Terminal of crystal osccilator (7.2 MHz)
50	$\overline{\text{XT}}$	$\overline{\text{XT}}$	---	Terminal of crystal osccilator (7.2 MHz)
51	XT	XT	---	Terminal of crystal osccilator (7.2 MHz)
52	GND	GND	---	Ground
23,53	V DD	V DD	---	+5V (Connecting inside)

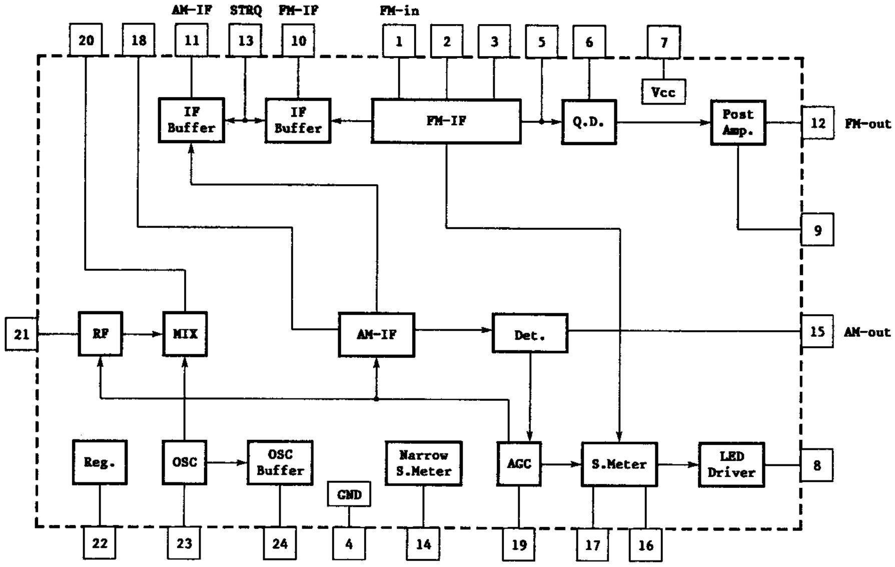
IC551: TC9164N (Analog Switch)


VSS
GND
VDD
1
14
28
L-S1
L-S2
L-S3
L-S4
L-COM1
L-S5
L-S6
L-COM2
L-S7
L-S8
L-COM3
ST
R-S1
R-S2
R-S3
R-S4
R-COM1
R-S5
R-S6
R-COM2
R-S7
R-S8
R-COM3
DATA
CK
Level shift
Latch circuit
Latch circuit
Level shift
Shift resistor

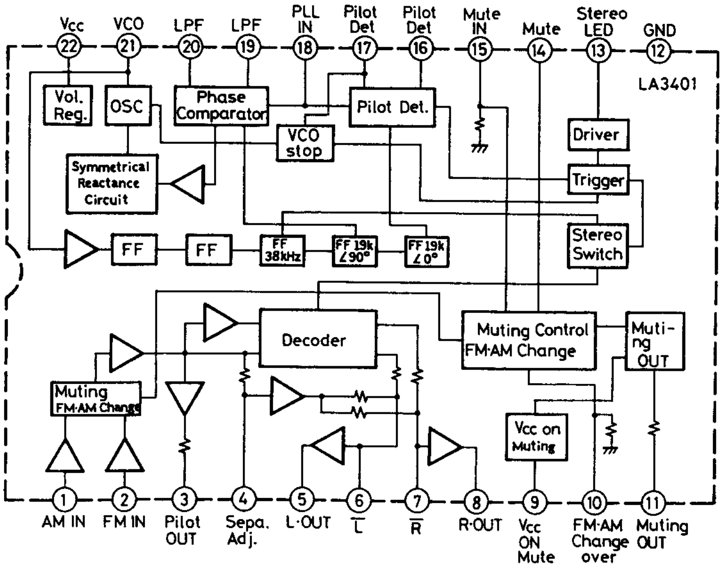
IC102 : LC7217 (PLL Synthesizer)


SYC
LC7217
XIN
XOUT
FM IN
AM IN
CE
DI
CL
DO
Reference Divider
Phase Detector Charge Pump
SWALLOW counter 1 16, 1 17 4bit
1/2
12bit Programmable Divider
Shift Register Latch
Universal Counter
PD1
PD2
HCTR
LCTR
Vdd
Vss
OUT0
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
IN0
IN1

IC104 : LA1266A (FM/AM IF & DET.)


AM-IF
STRQ
FM-IF
FM-in
IF Buffer
IF Buffer
FM-IF
Q.D.
Vcc
Post Amp.
FM-out
AM-out
RF
MIX
AM-IF
Det.
Reg.
OSC
OSC Buffer
GND
Narrow S.Meter
AGC
S.Meter
LED Driver

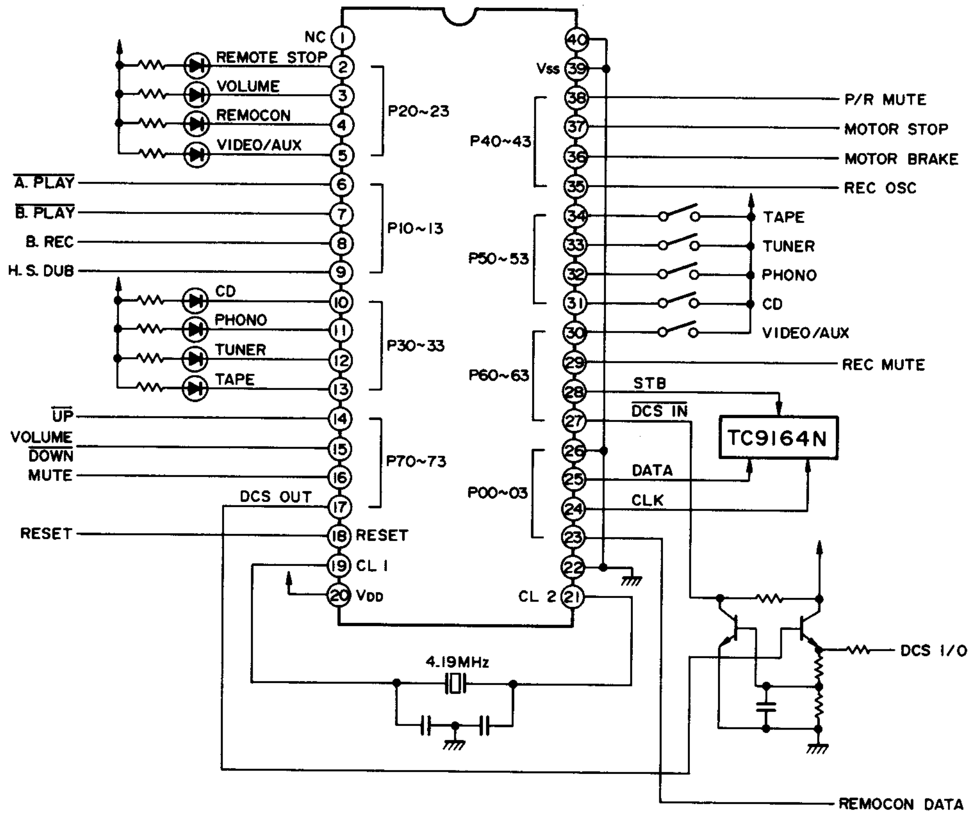
IC105 : LA3401 (FM M.P.X.)


Vcc
VCO
LPF
LPF
PLL IN
Pilot Det
Pilot Det
Mute IN
Mute
Stereo LED
GND
LA3401
Vol. Reg.
OSC
Phase Comparator
Pilot Det.
VCO stop
Driver
Symmetrical Reactance Circuit
Trigger
Stereo Switch
FF
FF
FF 38kHz
FF 19k ∠90°
FF 19k ∠0°
Decoder
Muting Control FM·AM Change
Muting OUT
Muting FM·AM Change
Vcc on Muting
AM IN
FM IN
Pilot OUT
Sepa. Adj.
L·OUT
L̄
R̄
R·OUT
Vcc ON Mute
FM·AM Change over
Muting OUT

IC102 : LC7217 (PLL Synthesizer)

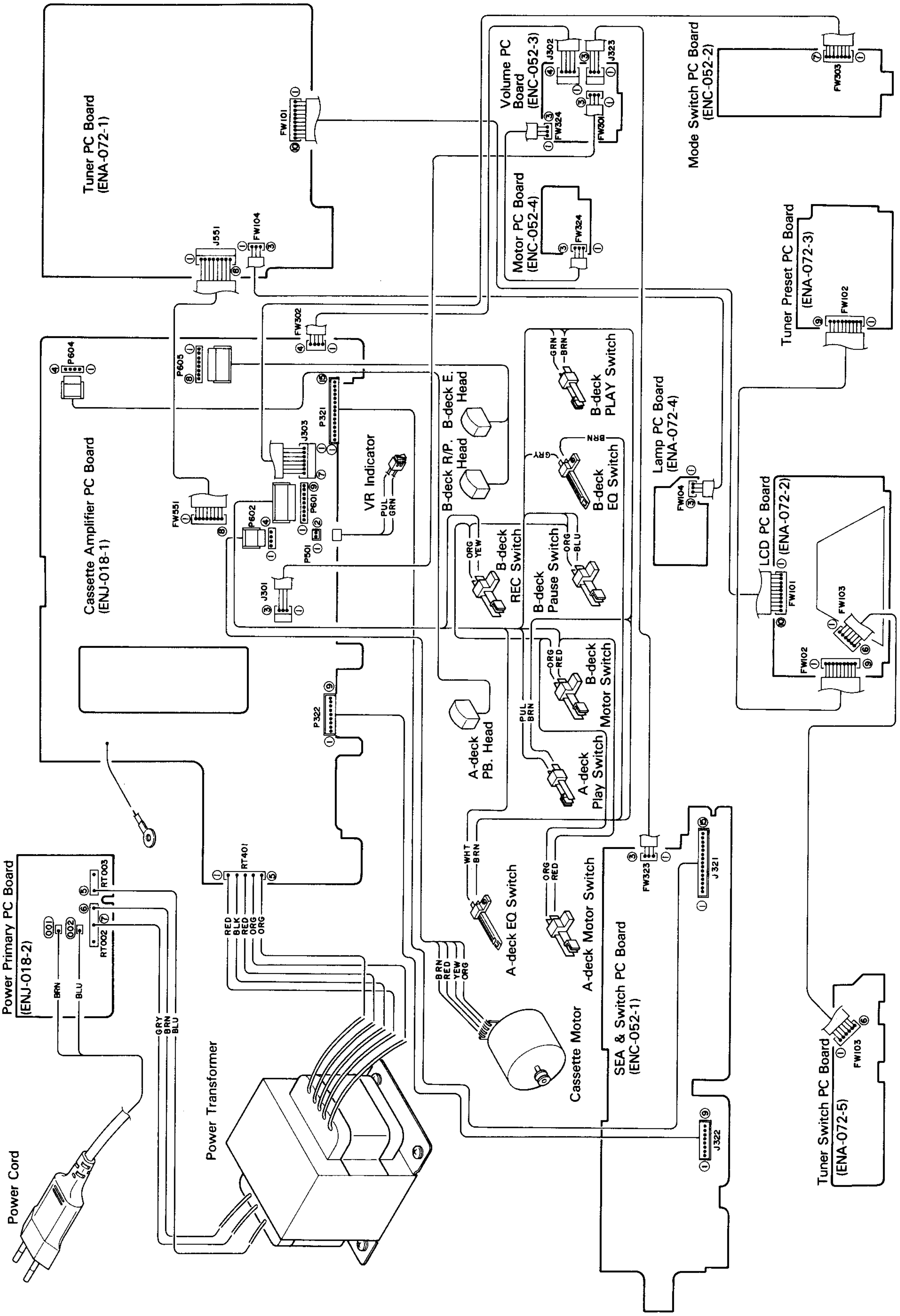
Symbol	Pin No.	Details	Function	I/O
Xin Xout	1 24	X'tal OSC	·Crystal oscillator (7.2 MHz)	I O
FMIN	19	Local oscillator signal input	·FMIN is selected for serial data input: DV=1 is assigned. ·Input frequency is 10 ~ 130 MHz (125 mVrms min.). ·The signal passes through the built-in pre-scaler(1/2) and is transmitted to the swallow counter.	I
AMIN	18	Local oscillator signal input	·AMIN is selected for serial data input: DV=0 is assigned. ·When serial data is input: SP=1 is assigned: ·Input frequency is 2 ~ 40 MHz (125 mVrms min.). ·The signal is transmitted to the swallow counter without passing through the built-in pre-scaler(1/2). ·When serial data is input: SP=0 is assigned: ·Input frequency is 0.5 ~ 10 MHz (125 mVrms min.). ·The signal is transmitted directly to the 12-bit programmable divider.	I
PD1 PD2	21 22	Charge pump output	·PLL charge pump output. When the local oscillator signal frequency divided by N results in a frequency higher than the reference frequency, high level signals are output from PD1 and PD2. When it is lower than the reference frequency, low level signals are output.	O
SYC	6	Controller clock	·This is the controller clock output pin and a 400 kHz signal (duty 66 %) is output after the power is turned ON.	O (N-ch open drain)
V dd	20	Power supply	·Power supply pin for LC7217. It supplies 4.5 ~ 6.5 V when the PLL circuit is activated.	-
V ss	23	Ground	·GND pin of LC7217.	-
CE	2	Chip enable	·This pin goes high when serial data is input (DI) to LC7217 or output from it.	I
CL	4	Clock	·This clock is used to synchronize data when serial data is input (DI) to or output (DO) from LC7217.	I
DI	3	Input data	·Input pin for serial data which is transmitted from the controller to LC7217. ·A total of 36 bits of data should be input for initialization.	I
DO	5	Output data	·Output pin for serial data transmitted from LC7217 to the controller. ·A total of 24 bits can be output from the internal shift register in synchronized with CL.	O (N-ch open drain)
$\overline{\text{OUT 0}}$ $\overline{\text{OUT 1}}$ $\overline{\text{OUT 2}}$ $\overline{\text{OUT 3}}$ $\overline{\text{OUT 4}}$ $\overline{\text{OUT 5}}$ $\overline{\text{OUT 6}}$	9 10 11 12 13 14 17	Output port	·Latches O 0 ~ O 6 of the serial data transmitted from the controller, and inverts the data to output it in parallel. ·$\overline{\text{OUT 0}}$ can outputs the time base for clock (8 Hz). (When TB = 1.) ·$\overline{\text{OUT 1}}$ and $\overline{\text{OUT 2}}$ are complementary outputs. ·$\overline{\text{OUT 0}}$, $\overline{\text{OUT 3}}$, $\overline{\text{OUT 4}}$, $\overline{\text{OUT 5}}$ and $\overline{\text{OUT 6}}$ are N-ch open drain outputs (up to 13 V).	O
IN 0 IN 1	7 8	Input port	·The data at input ports IN 0, IN 1 is converted from parallel to serial, and can be output from output pin DO.	I
HCTR	16	General purpose measurement signal input pin	·With serial data input: SC = 1, HCTR is selected. ·The signal is transmitted to the general-purpose counter (20-bit binary counter) via a 1/8 divider internally. For this, the value of the general-purpose counter becomes 1/8 of the actual frequency which is input to the HCTR pin. ·The measured results can be output from the MSB of the general-purpose counter via output pin DO.	I
LCTR	15	General purpose counter frequency input pin	·With serial data input: SC = 0, LCTR is selected. ·At this time, if serial data is input: SF = 1 ; ·The signal is transmitted directly to the general-purpose counter without passing through the internal 1/8 divider. ·If serial data is input SF = 0 ; ·Input frequency is 1 Hz ~ 20kHz (V IH = 0.7 V DD min., V IL = 0.3 V DD max.) ·The measurement periods of 1-cycle and 2-cycle can be selected; when 2-cycle is selected, the input frequency is 2 Hz ~ 20kHz.(GT = 1/0 : 2/1 period)	I

IC501 : μPD7507HCU-234 (Mechanism Control)


NC
REMOTE STOP
VOLUME
REMOCON
VIDEO/AUX
P20~23
A. PLAY
B. PLAY
B. REC
H. S. DUB
P10~13
CD
PHONO
TUNER
TAPE
P30~33
UP
VOLUME
DOWN
MUTE
P70~73
DCS OUT
RESET
RESET
CL I
VDD
Vss
P40~43
P50~53
P60~63
P00~03
CL 2
P/R MUTE
MOTOR STOP
MOTOR BRAKE
REC OSC
TAPE
TUNER
PHONO
CD
VIDEO/AUX
REC MUTE
STB
DCS IN
TC9164N
DATA
CLK
4.19MHz
DCS I/O
REMOCON DATA

Pin No.	Symbol	Name	I/O	Terminal Function
1	φ out	---	-	Not used.(open)
2	P20/PSTB	STOP LED	O	REMOTE STOP indicator
3	P21/PTOUT	VOLUME LED	O	VOLUME indicator
4	P22	REMOCON LED	O	REMOTE CONTROL RECEIVED indicator
5	P23	VIDEO/AUX	O	SOURCE VIDEO/AUX indicator
6	P10	A PLAY	I	A deck PLAY switch input
7	P11	B PLAY	I	B deck PLAY switch input
8	P12	B REC	I	B deck REC switch input
9	P13	H.DUB	I	High speed dubbing switch input
10	P30	CD	O	SOURCE CD indicator
11	P31	PHONO	O	SOURCE PHONO indicator
12	P32	TUNER	O	SOURCE TUNER indicator
13	P33	TAPE	O	SOURCE TAPE indicator
14	P70	VOLUME UP	O	VOLUME UP control
15	P71	VOLUME DOWN	O	VOLUME DOWN control
16	P72	MUTE	O	SOURCE MUTE
17	P73	DCS OUT	O	DCS(COMPULINK) output
18	RESET	RESET	I	RESET input
19	CL1	CLOCK	I	CLOCK input (4.19 MHz)
20	V dd	V dd	-	+5 V
21	CL2	CLOCK	I	CLOCK input (4.19 MHz)
22	INT1	---	-	-----
23	P00/INT0	RM IN	I	REMOTE CONTROL input
24	P01/SCK	CLK	O	CLK (Analog switch)
25	P02/SO	DATA	O	DATA (Analog switch)
26	P03/SI	---	-	-----
27	P60	DCS IN	I	DCS(COMPULINK) input
28	P61	STB	O	STB (Analog switch)
29	P62	REC MUTE	O	REC MUTE
30	P63	VIDEO	I	VIDEO/AUX switch
31	P50	CD	I	CD switch
32	P51	PHONO	I	PHONO switch
33	P52	TUNER	I	TUNER switch
34	P53	TAPE	I	TAPE switch
35	P40	REC OSC	O	REC OSC control
36	P41	MOTOR BRAKE	O	MOTOR BRAKE control
37	P42	MOTOR STOP	O	MOTOR STOP control
38	P43	P/R MUTE	O	PLAY/REC MUTE
39	V ss	V ss	-	GND
40	EVENT	---	-	-----

Connection Diagram


Tuner PC Board
(ENA-072-1)
FW101
J551
FW104
Volume PC Board
(ENC-052-3)
J302
J323
FW324
FW301
Mode Switch PC Board
(ENC-052-2)
FW303
Motor PC Board
(ENC-052-4)
FW324
Tuner Preset PC Board
(ENA-072-3)
FW102
P604
P605
FW302
P321
J303
P601
P602
P501
J301
FW551
Cassette Amplifier PC Board
(ENJ-018-1)
VR Indicator
PUL
GRN
B-deck R/P. Head
B-deck E. Head
GRN
BRN
B-deck PLAY Switch
GRY
BRN
B-deck EQ Switch
Lamp PC Board
(ENA-072-4)
FW104
LCD PC Board
(ENA-072-2)
FW101
FW103
FW102
ORG
YEW
B-deck REC Switch
ORG
BLU
B-deck Pause Switch
ORG
RED
B-deck Motor Switch
A-deck PB. Head
PUL
BRN
A-deck Play Switch
P322
RT401
WHT
BRN
A-deck EQ Switch
ORG
RED
A-deck Motor Switch
FW323
J321
SEA & Switch PC Board
(ENC-052-1)
BRN
RED
YEW
ORG
Cassette Motor
Power Primary PC Board
(ENJ-018-2)
Q01
Q02
RT003
RT002
BRN
BLU
GRY
BRN
BLU
RED
BLK
RED
ORG
ORG
Power Transformer
Power Cord
J322
Tuner Switch PC Board
(ENA-072-5)
FW103

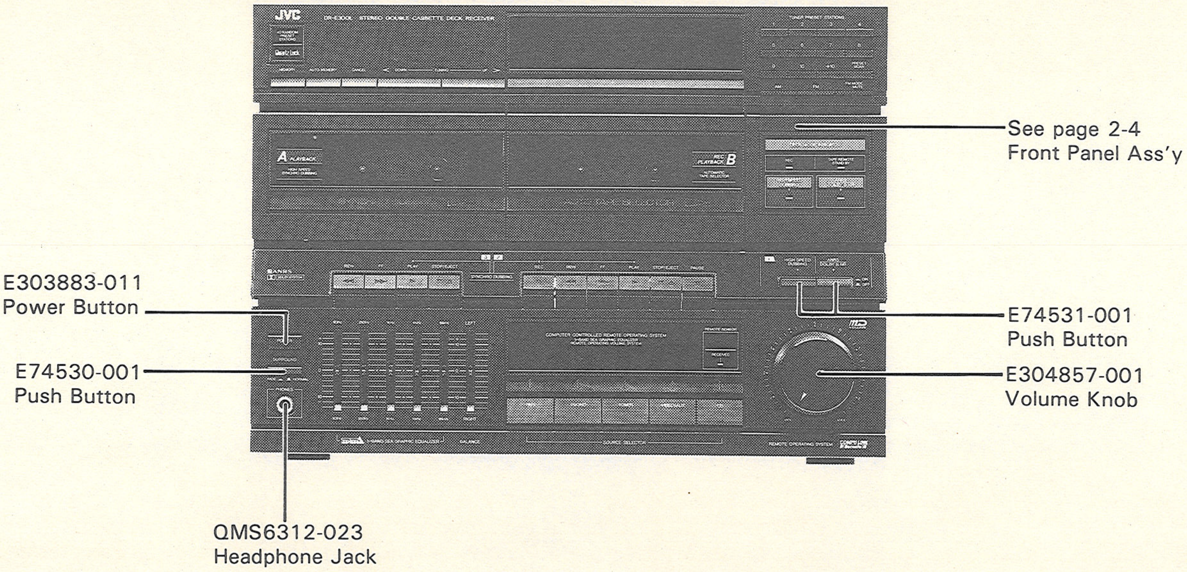
PARTS LIST

Contents

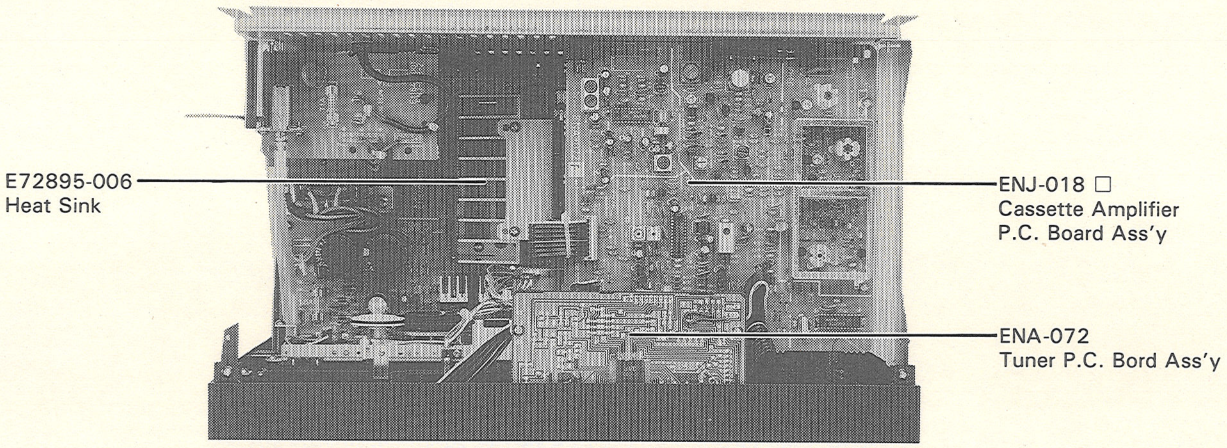
Main Parts Locations 2-2
Exploded View and Parts List 2-3
Mechanism Ass'y 2-7
Printed Circuit Board and Parts List 2-11
■ ENJ-018☐ Cassette Amplifier P.C. Board Ass'y 2-11
■ ENF-052$\boxed{A}$ SEA & Switch P.C. Board Ass'y 2-15
■ ENA-072☐ Tuner P.C. Board Ass'y 2-17
■ ENJ-019$\boxed{A}$ Dolby P.C. Board Ass'y 2-22
■ ENH-060☐ Phone Equalizer P.C. Board Ass'y 2-23
■ ENJ-004$\boxed{H}$ Record Amplifier and Playback Amplifier P.C. Board Ass'y 2-24
Accessories List 2-25
Packing Materials and Part Numbers 2-26

Main Parts Locations

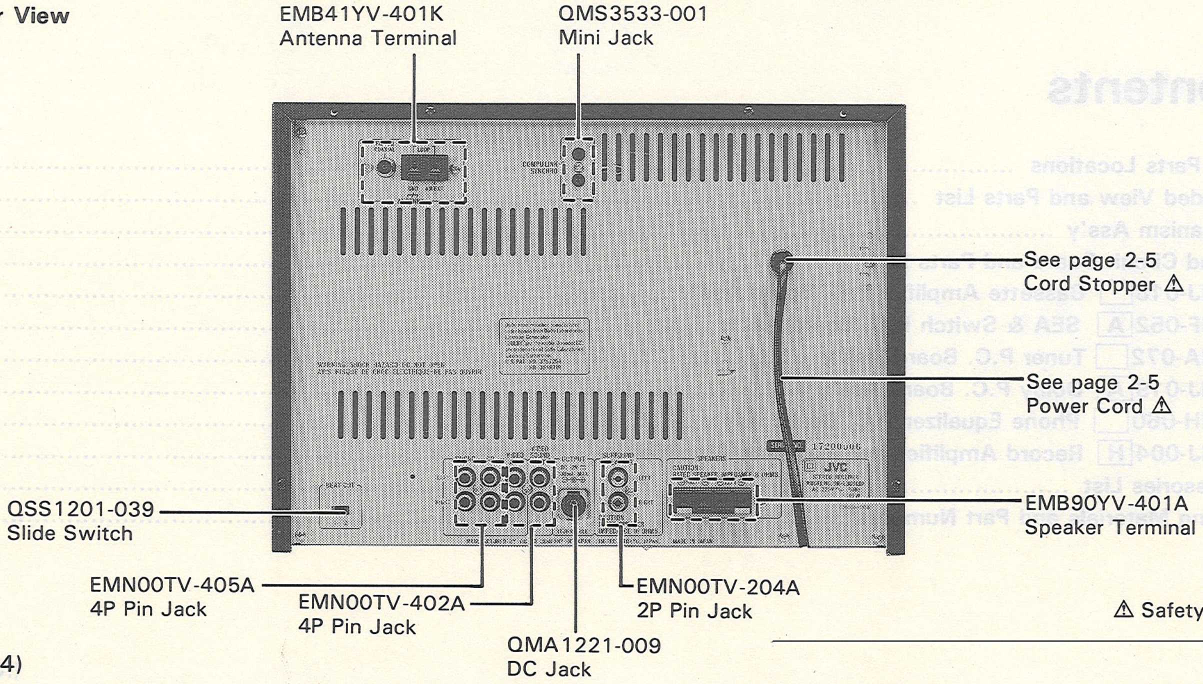
■ Front View


See page 2-4
Front Panel Ass'y
E303883-011
Power Button
E74531-001
Push Button
E74530-001
Push Button
E304857-001
Volume Knob
QMS6312-023
Headphone Jack

■ Top View

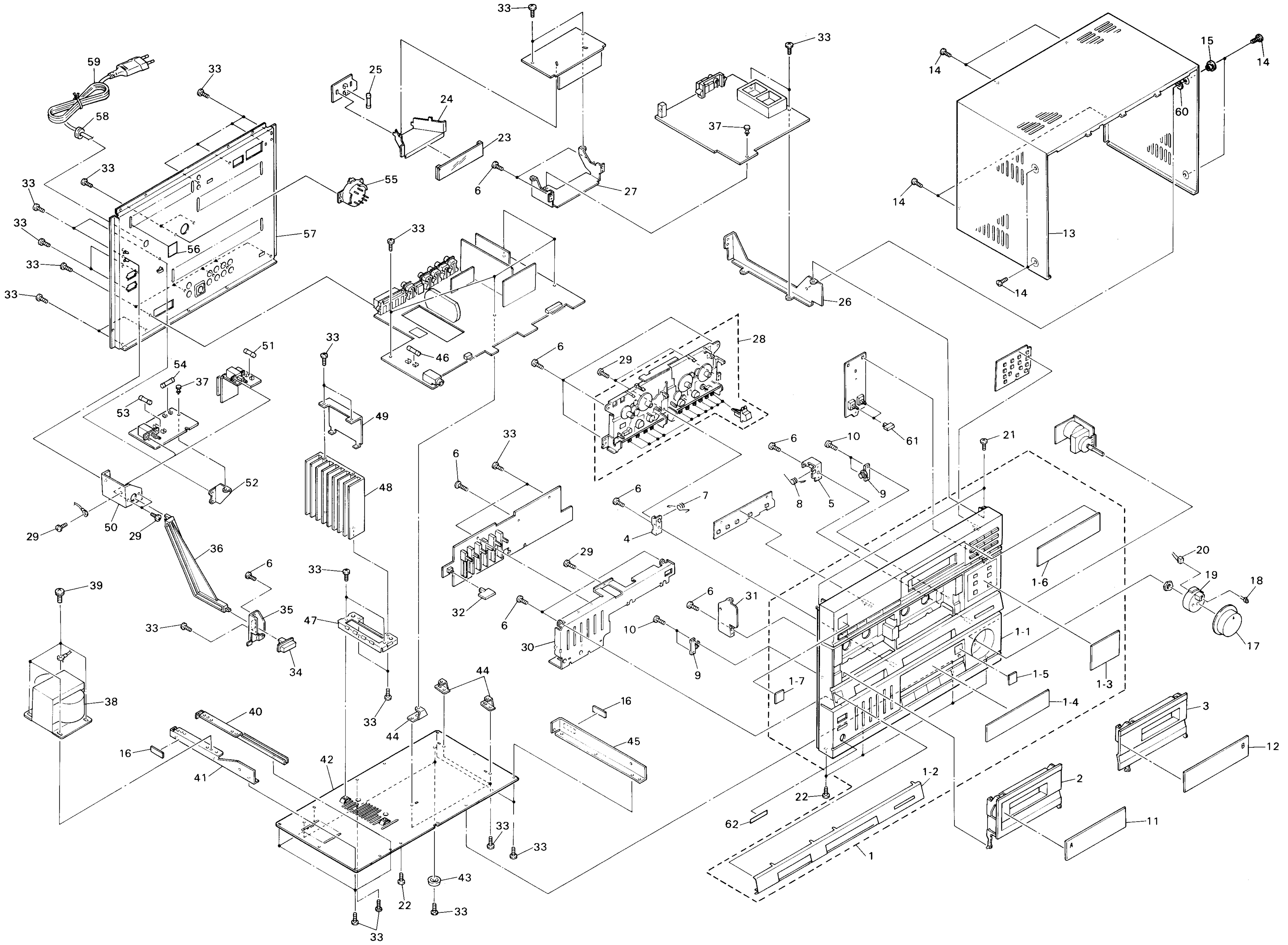

E72895-006
Heat Sink
ENJ-018 □
Cassette Amplifier
P.C. Board Ass'y
ENA-072
Tuner P.C. Bord Ass'y

■ Rear View


EMB41YV-401K
Antenna Terminal
QMS3533-001
Mini Jack
See page 2-5
Cord Stopper ⚠
See page 2-5
Power Cord ⚠
QSS1201-039
Slide Switch
EMB90YV-401A
Speaker Terminal
EMN00TV-405A
4P Pin Jack
EMN00TV-402A
4P Pin Jack
EMN00TV-204A
2P Pin Jack
QMA1221-009
DC Jack

⚠ Safety Parts

Exploded View and Parts List


33
59
58
33
33
33
33
33
33
33
55
57
56
25
24
23
6
27
33
33
37
15
14
14
60
14
13
14
26
33
46
51
54
37
53
52
50
29
29
36
6
35
33
34
39
38
33
49
48
33
47
33
44
44
40
41
16
42
22
43
33
33
33
33
6
33
29
30
32
6
28
29
6
7
4
6
10
5
8
9
61
6
31
10
9
21
1-6
1-1
1-5
1-7
1-4
1-3
20
19
18
17
3
12
2
11
1-2
22
62
1
16
45

⚠	Item No.	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-DRE300BKU	Front Panel Ass'y	1		C,A,P,PG,U
		EFP-DRE300LBKE	Front Panel Ass'y	1		LE,LEF,LEV,LG,LBS,LGI
	1-1	E11630-003	Front Panel	1		C,A,P,PG,U
		E11630-004	Front Panel	1		LE,LEF,LEV,LG,LBS,LGI
	1-2	E25904-001	Cassette Plate	1		
	1-3	E305145-001	Ornament	1		
	1-4	E305147-001	Ornament	1		
	1-5	E72436-007	Screen	1		
	1-6	E305149-001	Window Screen	1		
	1-7	E74532-001	Ornament	1		
	2	E25893-001	Cassette Holder	1	A	
	3	E25895-001	Cassette Holder	1	B	
	4	E72892-001	Holder Bracket	1		
	5	E72893-001	Holder Bracket	1		
	6	SBSF3008Z	Screw	14		
	7	E72896-001	Holder Spring	1		
	8	E72897-003	Holder Spring	1		
	9	SBSF3010Z	Screw	4		
	10	E305243-001	Damper Ass'y	2		
	11	E305151-001	Lid Plate	1	A	
	12	E305153-001	Lid Plate	1	B	
	13	E25900-001	Metal Cover	1		
	14	SDSE3008M	Screw	8		
	15	BUSH-PUL	Bushing	1		LG
	16	EXO035010R20S	Spacer	2		
	17	E304857-001	Volume Knob	1		
	18	SLT-25VR52F	L.E.D.	1		
	19	E304320-003	Holder	1		
	20	EWS142-006H	Socket Wire Ass'y	1		
	21	GBSB3008M	Screw	3		
	22	SDSB3008M	Screw	4		
	23	E73828-001	Sheet	1		
	24	E304554-001	Reflector	1		
	25	ELP4101-003	Fuse Lamp	1	PL101	
	26	E305156-001	Side Bracket	1	Right	
	27	E305155-001	LCD Bracket	1		
	28	—	Cassette Mechanism Ass'y	1	See page 2-7	
	29	SBST3006Z	Screw	6		
	30	E25903-001	Shield Bracket	1		
	31	E74536-001	Bracket	1		
	32	E74530-001	Push Button	1		
	33	SBSB3008N	Screw	43		
	34	E303883-011	Power Button	1		
	35	E74535-001	Switch Bracket	1		
	36	E304640-002	Push Shaft	1		
	37	E48729-008	Plastic Rivet	2		
⚠	38	ETP1050-11JA	Power Transformer	1		C
⚠		ETP1050-13EA	Power Transformer	1		A,LE,LEF,LEV,LG,LGI
⚠		ETP1050-13FA	Power Transformer	1		P,PG,U
⚠		ETP1050-13EABS	Power Transformer	1		LBS
	39	E65389-002	Special Screw	4		
	40	E305160-001	Center Bracket	1		
	41	E305158-001	Side Bracket	1	Left	
	42	E25897-001	Bottom Plate	1		
	43	E47227-021	Foot	2		
	44	E68587-009	Bracket	3		
	45	E305159-001	Side Bracket	1	Right	
⚠	46	QMF51A2-1R6S	Fuse	1	F401	A,LE,LEV,LEF,LG,LGI,P,PG,U
⚠		QMF51U1-1R6	Fuse	1	F401	C
⚠		QMF51E2-1R6SBS	Fuse	1	F401	LBS

⚠	Item No.	Part Number	Part Name	Q'ty	Description	Areas
	47	E74537-001	Heat Sink Bracket	1		
	48	E72895-006	Heat Sink	1		
	49	E73875-001	Leaf Spring	1		
	50	E72226-002	Switch Bracket	1		
	51	QMF51U1-1R6	Fuse	1	F001	C
	52	E72331-002	Stay Bracket	1		Except for C
⚠	53	QMF51A2-1R0S	Fuse	1	F001	A,LE,LEV,LEF,LG,LGI
⚠		QMF51A2-2R0S	Fuse	1	F001	P,PG,U
⚠		QMF51E2-1R0SBS	Fuse	1	F001	LBS
	54	QMF51A2-1R0S	Fuse	1	F002	P,PG,U
⚠	55	QSR0085-007	Voltage Selector	1		P,PG,U
	56	E65507-001	Caution Label	1		C
	57	E25898-001	Rear Panel	1	Made in Japan	C
		E25898-002	Rear Panel	1	Made in Japan	P,PG,U
		E25898-003	Rear Panel	1	Made in Japan	A
		E25898-004	Rear Panel	1	Made in Japan	LE,LEF
		E25898-005	Rear Panel	1	Made in Japan	LBS
		E25898-006	Rear Panel	1	Made in Japan	LG,LEV,LGI
		E25898-007	Rear Panel	1	Made in Singapore	C
		E25898-008	Rear Panel	1	Made in Singapore	P,PG,U
		E25898-009	Rear Panel	1	Made in Singapore	A
		E25898-013	Rear Panel	1	Made in Singapore	LE,LEF
		E25898-011	Rear Panel	1	Made in Singapore	LBS
		E25898-014	Rear Panel	1	Made in Singapore	LG,LEV,LGI
	–	E303260-130	Rating Label	1	Made in Singapore	LE,LEF,LEV,LGI
⚠	58	QHS3876-162	Cord Stopper	1		Except for LBS
⚠		QHS3876-162BS	Cord Stopper	1		LBS
⚠	59	QMP1340-200H	Power Cord	1		C
⚠		QMP2560-244	Power Cord	1		A
⚠		QMP7600-200	Power Cord	1		P,PG,U
⚠		QMP3900-200	Power Cord	1		LE,LEF,LEV
⚠		QMP3990-200	Power Cord	1		LG,LGI
⚠		QMP9017-008BS	Power Cord	1		LBS
	60	E46891-026	Spacer	1		LG,LGI
	61	E74531-001	Push Button	2		
	62	E49267-001	Origin Marking Label	1	Made in Japan	LBS
		E49267-004	Origin Making Label	1	Made in Singapore	LBS

The Marks for Designated Areas

C···················Canada
A···················Australia
LE,LEF···········Europe
LEV················Switzer Land
LG··················West Germany

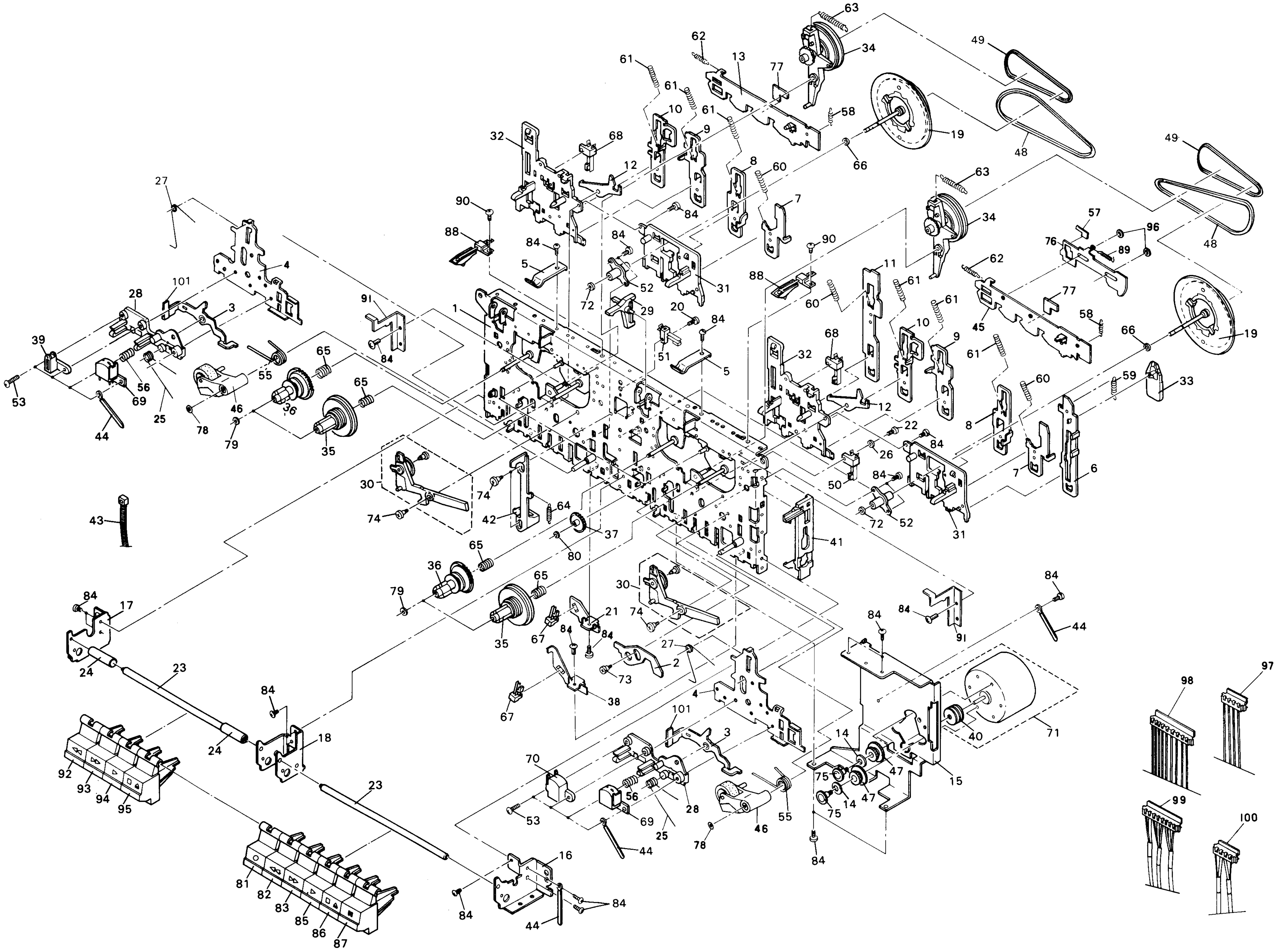
LGI················Itary
LES················Spain
LBS················U.K.
P,PG···········U.S.Military Market
U··················Other Countries
No mark indicates all areas.

■ Mechanism Ass'y Parts List

⚠	Item No.	Part Number	Part Name	Q'ty	Description	Areas
	1	EGSC1603	Chassis (W) Ass'y	1		
	2	EGSD1522	Pause Arm	1		
	3	EGSD1602	AS Arm	2		
	4	EGSC1601	Head Chassis Ass'y	2		
	5	EGSD1537	Pack Spring	2		
	6	EGSD1508	Pause Lever	1		
	7	EGSD1509	Stop Lever	2		
	8	EGSD1504	Play Lever	2		
	9	EGSD1506	FF Lever	2		
	10	EGSD1507	Rew Lever	2		
	11	EGSD1505	Rec Lever	1		
	12	EGSD1570	Rew Arm (S)	2		
	13	EGSD1525	Lock Cam (A) Ass'y	1		
	14	EGMD1270	Washer (B)	2		
	15	EGSC1550	Motor Bracket	1		
	16	EGSD1544	Button Bracket (RF)	1		
	17	EGSD1533	Button Bracket (LW)	1		
	18	EGSDS1604	Button Bracket	1		
	19	EGSD3552	Flywheel Ass'y	2		
	20	SDST2610Z	Screw	1		
	21	EGSD1593	Switch Bracket (F)	2		
	22	SDST2005Z	Screw	1		
	23	EGSD2513	Button Shaft	2		
	24	EGMD2043	Button Collar	2		
	25	EGSD6529	Head Chassis Spring	2		
	26	8133023431	Washer (S)	1		
	27	EGSD6258	Idler Arm Spring	2		
	28	EGSC3555	Head Base	2		
	29	EGMC3021	Rec Sensor	1		
	30	EGSD3537	Idler Arm Ass'y	2		
	31	EGSB3502	Lever Base (A)	2		
	32	EGSB3501	Lever Base (B)	2		
	33	EGSC3504	Pause Cam	1		
	34	EGSD3583	Clutch Arm Ass'y (W)	2		
	35	EGMD3153	T. Reel Ass'y	2		
	36	EGSC3550	S. Reel	2		
	37	EGSD3509	FF Gear	2		
	38	EGSD1617	Switch Bracket (J)	1		
	39	EGMD3062	Tape Guide	1		
	40	EGSD2524	Motor Pulley	1		
	41	EGSC3505	Eject Lever (F)	1		
	42	EGSC3517	Eject Lever (W)	1		
	43	E33754-001	Nylon Band	1		
	44	1114-03-02	Cord Clamp	4		
	45	EGSD1620	Lock Cam (J) Ass'y	1		
	46	EGSD3554	Pinch Roller	2		
	47	EGMD4002	Motor Cushion	2		
	48	EGSD4509	Belt	2		
	49	EGZD4704	Belt	2		
	50	LSA-1119G	Leaf Switch	1		
	51	LSA-1120F-2N	Leaf Switch	1		
	52	EGSD5501	Housing Ass'y	2		
	53	SDSP2009Z	Screw	8		
	54	EGSDS8520	Insulator Sheet (A)	1		
	55	EGSD6530	P Roller Arm Spring	2		
	56	EGKD6009	Head Spring	2		
	57	EGSDS8521	Insulator Sheet (B)	1		
	58	EGSD6504	Auto Arm Spring	2		
	59	EGSD6505	Pause Lever Spring	1		
	60	EGSD6506	Lever Spring (A)	3		

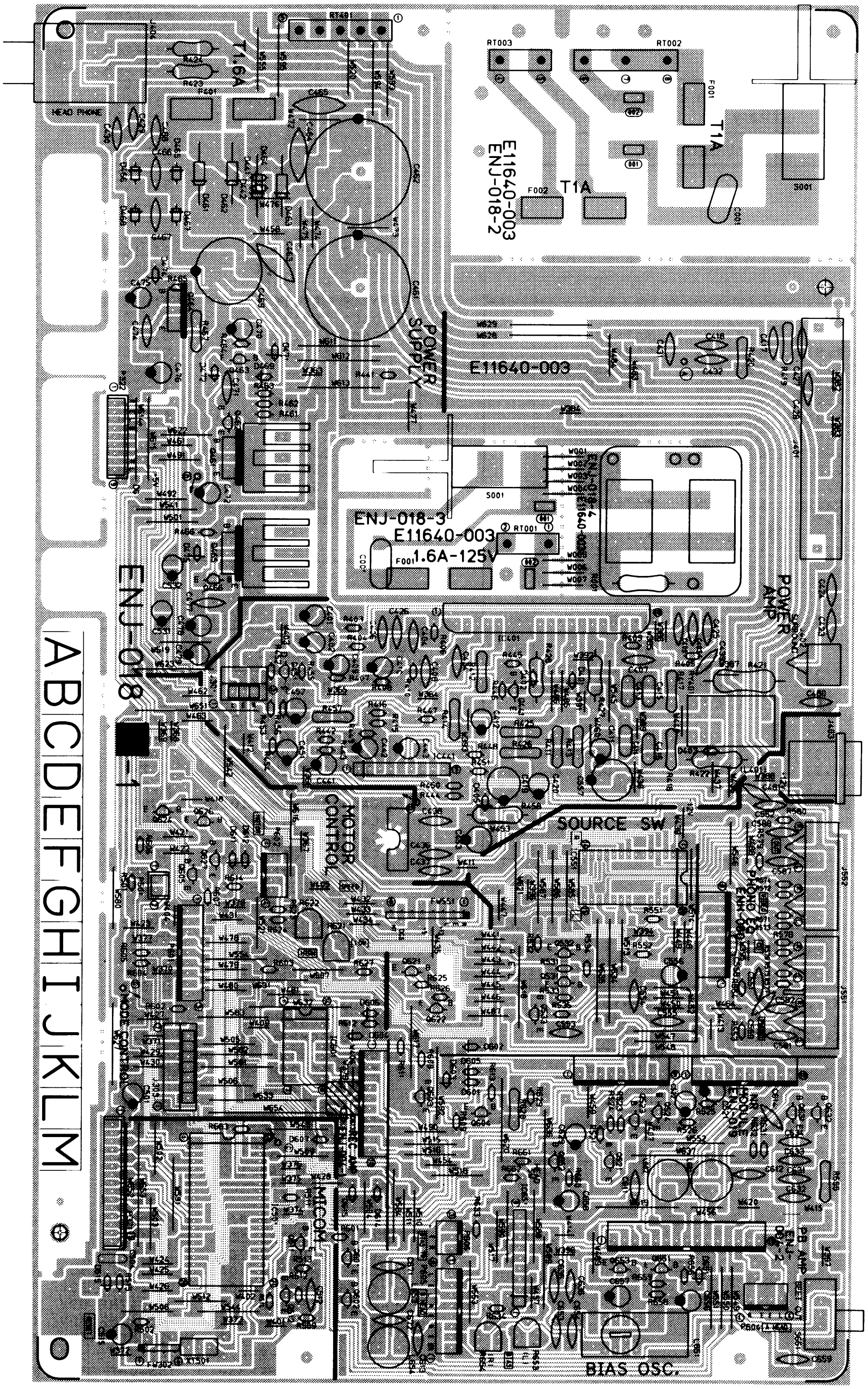
⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	61	EGSD6532	Lever Spring (E)	6		
	62	EGSD6508	Cam Spring	2		
	63	EGSD6509	Clutch Arm Spring	2		
	64	EGSD6510	Eject Spring	1		
	65	EGSD6514	Back Tension Spring	4		
	66	8342121013	Polyslider Washer	2		
	67	LSA-1119R	Leaf Switch	2		
	68	LSA-1120C-1	Leaf Switch	2		
	69	ENZ6004-005	R/P Head	2		
	70	EGME-188	E Head	1		
	71	EGSHU-2LSA	Motor Ass'y	1		
	72	8341116033	Polyslider Washer	2		
	73	EGMD8002	Screw (A)	1		
	74	EGSD8501	Screw (P)	4		
	75	EGSD8511	Motor Screw	2		
	76	EGSCS1618	Cam Plate (B)	1		
	77	EGSD8515	Insulator Sheet	1		
	78	8341121034	Polyslider Washer	2		
	79	8341116029	Polyslider Washer	4		
	80	8341112032	Polyslider Wahser	2		
	81	E304172-021	Button	1		
	82	E304172-022	Button	1		
	83	E304172-023	Button	1		
	84	SPST2004Z	Screw	25		
	85	E304172-024	Button	2		
	86	E304172-025	Button	1		
	87	E304172-026	Button	1		
	88	LSA-1132E1AU	Leaf Switch	2		
	89	EGSD6536	Cam Plate (B) Spring	1		
	90	SPST2605Z	Screw	2		
	91	EGSD1608	Switch Guard	2		
	92	E304172-027	Button	1		
	93	E304172-028	Button	1		
	94	E304172-029	Button	1		
	95	E304172-030	Button	1		
	96	EGSDS8522	Polyslider Washer	2		
	97	EGSD9571	Motor Wire	1		
	98	EGSD9570	9P Wire Ass'y	1		
	99	EGSD9589	8P Head Wire Ass'y	1		
	100	EGSD9590	4P Head Wire Ass'y	1		
	101	EGMD3020	Sensor Cap	2		

Mechanism Assembly


63
62
13
77
34
49
61
61
10
61
9
58
19
32
68
12
8
60
66
48
63
49
27
90
84
84
7
34
57
96
88
84
31
90
76
89
48
4
5
52
88
60
11
61
62
101
72
29
20
84
61
28
3
91
1
51
68
77
45
58
66
19
39
65
5
32
10
9
61
55
65
12
60
59
33
53
56
69
84
46
36
22
84
25
44
78
79
35
8
26
7
6
50
84
30
74
42
64
37
72
52
31
43
74
80
41
36
65
65
79
17
30
21
74
84
84
91
84
44
67
84
35
27
2
84
24
23
73
38
4
71
40
67
98
97
101
14
15
84
18
3
47
24
92
93
94
95
70
56
75
14
47
23
53
28
69
25
44
46
55
75
78
99
100
84
81
82
83
85
86
87
16
84
84
44

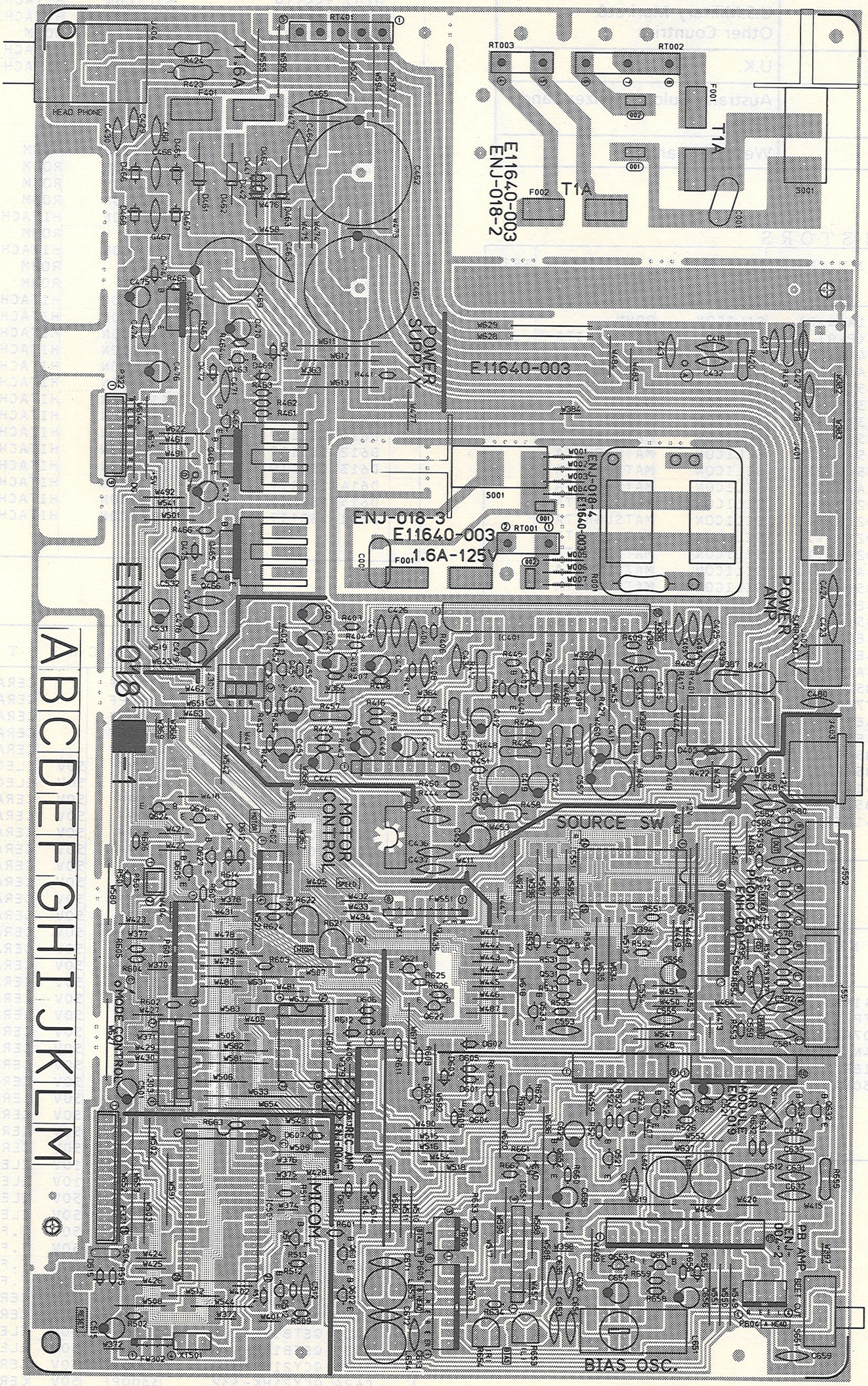
Printed Circuit Board Ass'y and Parts List

■ **ENJ-018 ☐ Cassette Amplifier P.C. Board Ass'y**


HEAD PHONE
T1.6A
E11640-003
ENJ-018-2
T1A
POWER SUPPLY
E11640-003
ENJ-018-3
E11640-003
1.6A-125V
POWER AMP
ENJ-018
ENJ-018-1
A
B
C
D
E
F
G
H
I
J
K
L
M
MOTOR CONTROL
SOURCE SW
MODE CONTROL
MICOM
BIAS OSC.
PB AMP

Printed Circuit Board Ass'y and Parts List

■ ENJ-018 ☐ Cassette Amplifier P.C. Board Ass'y


HEAD PHONE
T1.6A
RT401
RT003
RT002
F001
F002
T1A
S001
E11640-003
ENJ-018-2
POWER SUPPLY
ENJ-018-3
E11640-003
1.6A-125V
ENJ-018-4
E11640-003
POWER AMP
ENJ-018
-1
ABCDEFGHIJKLM
MOTOR CONTROL
SOURCE SW
MODE CONTROL
REC AMP ENJ-018
MICOM
NR MODULE ENJ-019
PB AMP ENJ-DD-2
BIAS OSC.

Note (1)

PC Board Ass'y	Designated Areas
ENJ-018 B	Canada
ENJ-018 C	U.S.Military Market& Other Countries
ENJ-018 D BS	U.K.
ENJ-018 E	Australia, Eulope, Swizer Land, Itary
ENJ-018 F	West Germany

TRANSISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q441	2SC1741A(Q,R)	SILICON	ROHM	
	Q451	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q461	2SB1274(R,S)	SILICON	SANYO	
	Q462	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q463	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q464	2SD1913(R,S)	SILICON	SANYO	
	Q465	2SD1913(R,S)	SILICON	SANYO	
	Q466	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q511	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q512	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q521	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q523	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q524	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q531	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q532	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q533	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q601	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q602	DTC144ES	SILICON	ROHM	
	Q603	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q604	DTC144ES	SILICON	ROHM	
	Q605	DTC144ES	SILICON	ROHM	
	Q621	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q622	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q624	2SC3377(Q,R)	SILICON	ROHM	
	Q626	DTC144ES	SILICON	ROHM	
	Q627	DTC144ES	SILICON	ROHM	
	Q631	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q632	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q651	2SC1741A(Q,R)	SILICON	ROHM	
	Q652	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q653	2SC1741A(Q,R)	SILICON	ROHM	

I. C. S

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC401	STK4141MK5	I.C.	SANYO	
	IC441	TA7317P	I.C.	TOSHIBA	
	IC501	UPD7507HCU-234	I.C.	NEC	
	IC551	TC9164N	I.C.	TOSHIBA	
	IC601	TC4001BP	I.C.	TOSHIBA	
	IC651	UPC1330HA	I.C.	NEC	

DIODES

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D401	1SS119	SILICON	HITACHI	
	D402	1SS119	SILICON	HITACHI	
	D403	1SS119	SILICON	HITACHI	
	D405	MTZ12JC	ZENER	ROHM	
	D441	1SS119	SILICON	HITACHI	
	D442	1SS119	SILICON	HITACHI	
	D461	ERB12-02RKL1	SILICON		
	D462	ERB12-02RKL1	SILICON		
	D463	ERB12-02RKL1	SILICON		
	D464	ERB12-02RKL1	SILICON		
	D465	1SR35-200A	SILICON	ROHM	
	D466	1SR35-200A	SILICON	ROHM	
	D467	1SR35-200A	SILICON	ROHM	
	D468	1SR35-200A	SILICON	ROHM	
	D469	1SS119	SILICON	HITACHI	
	D471	MTZ12JC	ZENER	ROHM	
	D472	1SS119	SILICON	HITACHI	
	D474	MTZ5.6JC	ZENER	ROHM	
	D475	MTZ13JC	ZENER	ROHM	
	D515	1SS119	SILICON	HITACHI	
	D601	1SS119	SILICON	HITACHI	
	D602	1SS119	SILICON	HITACHI	
	D603	1SS119	SILICON	HITACHI	
	D604	1SS119	SILICON	HITACHI	
	D605	1SS119	SILICON	HITACHI	
	D606	1SS119	SILICON	HITACHI	
	D607	1SS119	SILICON	HITACHI	
	D611	1SS119	SILICON	HITACHI	
	D612	1SS119	SILICON	HITACHI	
	D613	1SS119	SILICON	HITACHI	
	D614	1SS119	SILICON	HITACHI	
	D615	1SS119	SILICON	HITACHI	
	D651	1SS119	SILICON	HITACHI	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QCZ9019-472	4700PF		CERAMIC	B
	C001	QCZ9019-472	4700PF		CERAMIC	C
	C001	QCZ9019-472	4700PF		CERAMIC	E
	C001	QCZ9019-472	4700PF		CERAMIC	F
	C001	QCZ9019-472BS	4700PF		CERAMIC	DBS
	C401	QETB1HM-475	4.7MF	50V	ELECTRO	
	C402	QETB1HM-475	4.7MF	50V	ELECTRO	
	C403	QCS21HJ-101	100PF	50V	CERAMIC	B
	C403	QCS21HJ-101	100PF	50V	CERAMIC	C
	C403	QCS21HJ-101	100PF	50V	CERAMIC	DBS
	C403	QCS21HJ-101	100PF	50V	CERAMIC	E
	C403	QCS21HJ-151	150PF	50V	CERAMIC	F
	C404	QCS21HJ-101	100PF	50V	CERAMIC	B
	C404	QCS21HJ-101	100PF	50V	CERAMIC	C
	C404	QCS21HJ-101	100PF	50V	CERAMIC	DBS
	C404	QCS21HJ-101	100PF	50V	CERAMIC	E
	C404	QCS21HJ-151	150PF	50V	CERAMIC	F
	C405	QCS21HJ-101	100PF	50V	CERAMIC	B
	C405	QCS21HJ-101	100PF	50V	CERAMIC	C
	C405	QCS21HJ-101	100PF	50V	CERAMIC	DBS
	C405	QCS21HJ-101	100PF	50V	CERAMIC	E
	C405	QCS21HJ-220	22PF	50V	CERAMIC	F
	C406	QCS21HJ-101	100PF	50V	CERAMIC	B
	C406	QCS21HJ-101	100PF	50V	CERAMIC	C
	C406	QCS21HJ-101	100PF	50V	CERAMIC	DBS
	C406	QCS21HJ-101	100PF	50V	CERAMIC	E
	C406	QCS21HJ-220	22PF	50V	CERAMIC	F
	C407	QCS21HJ-100	10PF	50V	CERAMIC	
	C408	QCS21HJ-100	10PF	50V	CERAMIC	
	C409	QETB1AM-107	100MF	10V	ELECTRO	
	C410	QETB1AM-107	100MF	10V	ELECTRO	
	C411	QETB1HM-226	22MF	50V	ELECTRO	
	C412	QETB1HM-226	22MF	50V	ELECTRO	
	C413	QFV81HJ-104	0.1MF	50V	T.FILM	
	C414	QFV81HJ-104	0.1MF	50V	T.FILM	
	C415	QFV81HJ-104	0.1MF	50V	T.FILM	
	C416	QFV81HJ-104	0.1MF	50V	T.FILM	
	C417	QCF21HP-473	0.047MF	50V	CERAMIC	
	C418	QCF21HP-473	0.047MF	50V	CERAMIC	
	C419	QETB1HM-107	100MF	50V	ELECTRO	
	C420	QETB1HM-475	4.7MF	50V	ELECTRO	
	C423	QCY21HK-332	3300PF	50V	CERAMIC	F
	C424	QCY21HK-332	3300PF	50V	CERAMIC	F
	C425	QCS21HJ-470	47PF	50V	CERAMIC	F
	C426	QCS21HJ-470	47PF	50V	CERAMIC	F

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C427	QCS21HJ-330	33PF	50V	CERAMIC	F
	C428	QCS21HJ-330	33PF	50V	CERAMIC	F
	C429	QCS21HJ-471	470PF	50V	CERAMIC	F
	C430	QCS21HJ-471	470PF	50V	CERAMIC	F
	C431	QCY21HK-102	1000PF	50V	CERAMIC	F
	C432	QCY21HK-102	1000PF	50V	CERAMIC	F
	C434	QCS21HJ-471	470PF	50V	CERAMIC	F
	C436	QCF21HP-223	0.022MF	50V	CERAMIC	
	C437	QCF21HP-103	0.01MF	50V	CERAMIC	
	C438	QCS21HJ-331	330PF	50V	CERAMIC	F
	C439	QCS21HJ-101	100PF	50V	CERAMIC	F
	C441	QETB1HM-105	1MF	50V	ELECTRO	
	C442	QETB1AM-476	47MF	10V	ELECTRO	
	C443	QETB1CM-226	22MF	16V	ELECTRO	
	C451	QETB1HM-474	0.47MF	50V	ELECTRO	
	C452	QEK61HM-224G	0.22MF	50V	ELECTRO	
	C453	QETB1EM-107	100MF	25V	ELECTRO	
	C461	QEZ0061-478	4700MF	50V	ELECTRO	
	C462	QEZ0061-478	4700MF	50V	ELECTRO	
	C463	QCE22HP-103	0.01MF	500V	CERAMIC	
	C464	QCE22HP-103	0.01MF	500V	CERAMIC	
	C465	QCE22HP-103	0.01MF	500V	CERAMIC	B
	C465	QCE22HP-103	0.01MF	500V	CERAMIC	C
	C465	QCE22HP-103	0.01MF	500V	CERAMIC	DBS
	C465	QCE22HP-103	0.01MF	500V	CERAMIC	E
	C465	QFH42EK-104	0.1MF	250V	M.MYLAR	F
	C466	QCF21HP-103	0.01MF	50V	CERAMIC	
	C467	QCF21HP-103	0.01MF	50V	CERAMIC	
	C468	QCF21HP-103	0.01MF	50V	CERAMIC	
	C469	QETB1EM-228	2200MF	25V	ELECTRO	
	C470	QETB1EM-106	10MF	25V	ELECTRO	
	C471	QCF21HP-103	0.01MF	50V	CERAMIC	
	C472	QETB1CM-476	47MF	16V	ELECTRO	
	C474	QCF21HP-103	0.01MF	50V	CERAMIC	
	C475	QETB1EM-106	10MF	25V	ELECTRO	
	C476	QETB1AM-476	47MF	10V	ELECTRO	
	C477	QCF21HP-103	0.01MF	50V	CERAMIC	
	C478	QETB1CM-226	22MF	16V	ELECTRO	
	C479	QETB1CM-476	47MF	16V	ELECTRO	
	C480	QCY21HK-332	3300PF	50V	CERAMIC	B
	C480	QCY21HK-332	3300PF	50V	CERAMIC	C
	C480	QCY21HK-332	3300PF	50V	CERAMIC	DBS
	C480	QCY21HK-332	3300PF	50V	CERAMIC	E
	C481	QCS21HJ-331	330PF	50V	CERAMIC	F
	C501	QETB1CM-476	47MF	16V	ELECTRO	
	C504	QCZ0205-155	1.5MF	25V	CERAMIC	
	C512	QCY21HK-332	3300PF	50V	CERAMIC	
	C515	QETB1HM-225	2.2MF	50V	ELECTRO	
	C521	QETB1HM-475	4.7MF	50V	ELECTRO	
	C522	QETB1HM-475	4.7MF	50V	ELECTRO	
	C531	QETB1HM-475	4.7MF	50V	ELECTRO	
	C532	QETB1HM-475	4.7MF	50V	ELECTRO	
	C551	QCF21HP-473	0.047MF	50V	CERAMIC	
	C552	QCF21HP-103	0.01MF	50V	CERAMIC	
	C553	QCF21HP-473	0.047MF	50V	CERAMIC	
	C554	QCF21HP-473	0.047MF	50V	CERAMIC	
	C555	QCF21HP-473	0.047MF	50V	CERAMIC	
	C556	QETB1CM-107	100MF	16V	ELECTRO	
	C557	QETB2AM-476	47MF	100V	ELECTRO	
	C558	QCY21HK-332	3300PF	50V	CERAMIC	F
	C559	QCS21HJ-271	270PF	50V	CERAMIC	F
	C581	QCS21HJ-221	220PF	50V	CERAMIC	F
	C582	QCS21HJ-221	220PF	50V	CERAMIC	F
	C587	QCS21HJ-470	47PF	50V	CERAMIC	F
	C588	QCS21HJ-470	47PF	50V	CERAMIC	F
	C611	QCF21HP-473	0.047MF	50V	CERAMIC	F
	C612	QCF21HP-473	0.047MF	50V	CERAMIC	F
	C613	QCF21HP-473	0.047MF	50V	CERAMIC	F
	C614	QCF21HP-473	0.047MF	50V	CERAMIC	F
	C629	QETB1HM-225	2.2MF	50V	ELECTRO	
	C631	QCS21HJ-221	220PF	50V	CERAMIC	
	C632	QCS21HJ-221	220PF	50V	CERAMIC	
	C633	QCS21HJ-561	560PF	50V	CERAMIC	
	C634	QCS21HJ-561	560PF	50V	CERAMIC	
	C635	QCY21HK-102	1000PF	50V	CERAMIC	
	C636	QCY21HK-102	1000PF	50V	CERAMIC	
	C653	QCS21HJ-101	100PF	50V	CERAMIC	
	C654	QCS21HJ-101	100PF	50V	CERAMIC	
	C656	QETB1EM-106	10MF	25V	ELECTRO	
	C657	QETB1HM-105	1MF	50V	ELECTRO	
	C658	QETB1HM-105	1MF	50V	ELECTRO	
	C659	QCS21HJ-561	560PF	50V	CERAMIC	
	C671	QCS21HJ-101	100PF	50V	CERAMIC	
	C672	QCS21HJ-101	100PF	50V	CERAMIC	

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	B
⚠	R001	QRG032J-180AM	18	3W	O.M.FILM	C
⚠	R001	QRG032J-180AM	18	3W	O.M.FILM	DBS
⚠	R001	QRG032J-180AM	18	3W	O.M.FILM	E
⚠	R001	QRG032J-180AM	18	3W	O.M.FILM	F
	R403	QRD167J-102	1K	1/6W	CARBON	
	R404	QRD167J-102	1K	1/6W	CARBON	
	R405	QRD167J-104	100K	1/6W	CARBON	
	R406	QRD167J-104	100K	1/6W	CARBON	
	R407	QRD167J-821	820	1/6W	CARBON	
	R408	QRD167J-821	820	1/6W	CARBON	
	R409	QRD167J-104	100K	1/6W	CARBON	
	R410	QRD167J-104	100K	1/6W	CARBON	
⚠	R411	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R412	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R413	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R414	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
	R415	QRD167J-104	100K	1/6W	CARBON	
	R416	QRD167J-104	100K	1/6W	CARBON	
⚠	R417	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R417	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R417	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R417	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R417	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R418	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R418	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R418	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R418	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R418	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R419	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R419	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R419	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R419	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R419	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R420	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R420	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R420	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R420	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R420	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R421	QRG032J-180AM	18	3W	O.M.FILM	
⚠	R422	QRG022J-471AM	470	2W	O.M.FILM	B
⚠	R422	QRG022J-561AM	560	2W	O.M.FILM	C
⚠	R422	QRG022J-561AM	560	2W	O.M.FILM	DBS
⚠	R422	QRG022J-561AM	560	2W	O.M.FILM	E
⚠	R422	QRG022J-561AM	560	2W	O.M.FILM	F
⚠	R423	QRD125J-221	220	1/2W	UNF.CARBON	
⚠	R424	QRD125J-221	220	1/2W	UNF.CARBON	
⚠	R425	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R425	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R425	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R425	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R425	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R426	QRD14CJ-101S	100	1/4W	UNF.CARBON	B
⚠	R426	QRZ0077-101	100	1/4W	FUSIBLE	C
⚠	R426	QRZ0077-101	100	1/4W	FUSIBLE	DBS
⚠	R426	QRZ0077-101	100	1/4W	FUSIBLE	E
⚠	R426	QRZ0077-101	100	1/4W	FUSIBLE	F
⚠	R427	QRX012J-R22AM	0.22	1W	M.FILM	
⚠	R428	QRX012J-R22AM	0.22	1W	M.FILM	
	R441	QRD167J-473	47K	1/6W	CARBON	
	R442	QRD167J-103	10K	1/6W	CARBON	
	R443	QRD167J-473	47K	1/6W	CARBON	
	R444	QRD167J-563	56K	1/6W	CARBON	
	R445	QRD167J-103	10K	1/6W	CARBON	
	R446	QRD167J-333	33K	1/6W	CARBON	
	R447	QRD167J-562	5.6K	1/6W	CARBON	
	R448	QRD167J-223	22K	1/6W	CARBON	
	R449	QRD167J-683	68K	1/6W	CARBON	
	R450	QRD167J-334	330K	1/6W	CARBON	
	R451	QRD167J-223	22K	1/6W	CARBON	
	R452	QRD167J-105	1M	1/6W	CARBON	
	R453	QRD167J-473	47K	1/6W	CARBON	
	R454	QRD167J-224	220K	1/6W	CARBON	
	R455	QRD167J-105	1M	1/6W	CARBON	
	R456	QRD167J-182	1.8K	1/6W	CARBON	
⚠	R457	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R457	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R457	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R457	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R457	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R458	QRG022J-102AM	1K	2W	O.M.FILM	
	R461	QRD167J-332	3.3K	1/6W	CARBON	
	R462	QRD167J-332	3.3K	1/6W	CARBON	
	R463	QRD167J-103	10K	1/6W	CARBON	
	R464	QRD167J-102	1K	1/6W	CARBON	

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R465	QRD167J-102	1K	1/6W	CARBON	
	R466	QRD167J-222	2.2K	1/6W	CARBON	
⚠	R467	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	B
⚠	R467	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R467	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R467	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R467	QRZ0077-4R7	4.7	1/4W	FUSIBLE	F
	R501	QRD167J-561	560	1/6W	CARBON	
	R502	QRD167J-103	10K	1/6W	CARBON	
	R509	QRD167J-103	10K	1/6W	CARBON	
	R511	QRD167J-221	220	1/6W	CARBON	
	R512	QRD167J-223	22K	1/6W	CARBON	
	R513	QRD167J-473	47K	1/6W	CARBON	
	R514	QRD167J-103	10K	1/6W	CARBON	
	R515	QRD167J-104	100K	1/6W	CARBON	
	R521	QRD167J-473	47K	1/6W	CARBON	
	R523	QRD167J-103	10K	1/6W	CARBON	
	R524	QRD167J-103	10K	1/6W	CARBON	
	R525	QRD167J-392	3.9K	1/6W	CARBON	
	R526	QRD167J-392	3.9K	1/6W	CARBON	
	R531	QRD167J-102	1K	1/6W	CARBON	
	R532	QRD167J-102	1K	1/6W	CARBON	
	R533	QRD167J-103	10K	1/6W	CARBON	
	R534	QRD167J-103	10K	1/6W	CARBON	
	R535	QRD167J-473	47K	1/6W	CARBON	
	R551	QRD167J-123	12K	1/6W	CARBON	
	R552	QRD167J-123	12K	1/6W	CARBON	
	R553	QRD167J-105	1M	1/6W	CARBON	
	R554	QRD167J-105	1M	1/6W	CARBON	
	R571	QRD167J-243	24K	1/6W	CARBON	
	R572	QRD167J-243	24K	1/6W	CARBON	
	R573	QRD167J-683	68K	1/6W	CARBON	
	R574	QRD167J-683	68K	1/6W	CARBON	
	R575	QRD167J-363	36K	1/6W	CARBON	
	R576	QRD167J-363	36K	1/6W	CARBON	
	R577	QRD167J-243	24K	1/6W	CARBON	
	R578	QRD167J-243	24K	1/6W	CARBON	
	R579	QRD167J-102	1K	1/6W	CARBON	
	R580	QRD167J-102	1K	1/6W	CARBON	
	R601	QRD167J-473	47K	1/6W	CARBON	
	R602	QRD167J-103	10K	1/6W	CARBON	
	R603	QRD167J-472	4.7K	1/6W	CARBON	
	R604	QRD167J-102	1K	1/6W	CARBON	
	R605	QRD167J-103	10K	1/6W	CARBON	
	R606	QRD167J-152	1.5K	1/6W	CARBON	
	R607	QRD167J-103	10K	1/6W	CARBON	
	R608	QRD167J-223	22K	1/6W	CARBON	
	R609	QRD167J-222	2.2K	1/6W	CARBON	
	R611	QRD167J-473	47K	1/6W	CARBON	
	R612	QRD167J-473	47K	1/6W	CARBON	
	R613	QRD167J-223	22K	1/6W	CARBON	
	R614	QRD167J-473	47K	1/6W	CARBON	
	R621	QVPC604-472	4.7K	0.3W	VARIABLE	
	R622	QVZ3518-472	4.7K	0.1W	VARIABLE	
	R623	QRD167J-182	1.8K	1/6W	CARBON	
	R624	QRD167J-392	3.9K	1/6W	CARBON	
	R625	QRD167J-224	220K	1/6W	CARBON	
	R626	QRD167J-394	390K	1/6W	CARBON	
	R627	QRD167J-103	10K	1/6W	CARBON	
⚠	R628	QRD14CJ-220S	22	1/4W	UNF.CARBON	B
⚠	R628	QRZ0077-220	22	1/4W	FUSIBLE	C
⚠	R628	QRZ0077-220	22	1/4W	FUSIBLE	DBS
⚠	R628	QRZ0077-220	22	1/4W	FUSIBLE	E
⚠	R628	QRZ0077-220	22	1/4W	FUSIBLE	F
	R629	QRD167J-152	1.5K	1/6W	CARBON	
	R631	QRD167J-473	47K	1/6W	CARBON	
	R632	QRD167J-473	47K	1/6W	CARBON	
	R633	QRD167J-100	10	1/6W	CARBON	
	R634	QRD167J-100	10	1/6W	CARBON	
	R653	QVZ3518-224	220K	0.1W	VARIABLE	
	R654	QVZ3518-224	220K	0.1W	VARIABLE	
⚠	R655	QRD14CJ-150S	15	1/4W	UNF.CARBON	B
⚠	R655	QRZ0077-150	15	1/4W	FUSIBLE	C
⚠	R655	QRZ0077-150	15	1/4W	FUSIBLE	DBS
⚠	R655	QRZ0077-150	15	1/4W	FUSIBLE	E
⚠	R655	QRZ0077-150	15	1/4W	FUSIBLE	F
	R656	QRD167J-222	2.2K	1/6W	CARBON	
	R658	QRD167J-511	510	1/6W	CARBON	
	R659	QRD167J-471	470	1/6W	CARBON	
	R660	QRD167J-562	5.6K	1/6W	CARBON	
	R661	QRD167J-332	3.3K	1/6W	CARBON	
	R662	QRD167J-473	47K	1/6W	CARBON	
	R663	QRD167J-103	10K	1/6W	CARBON	

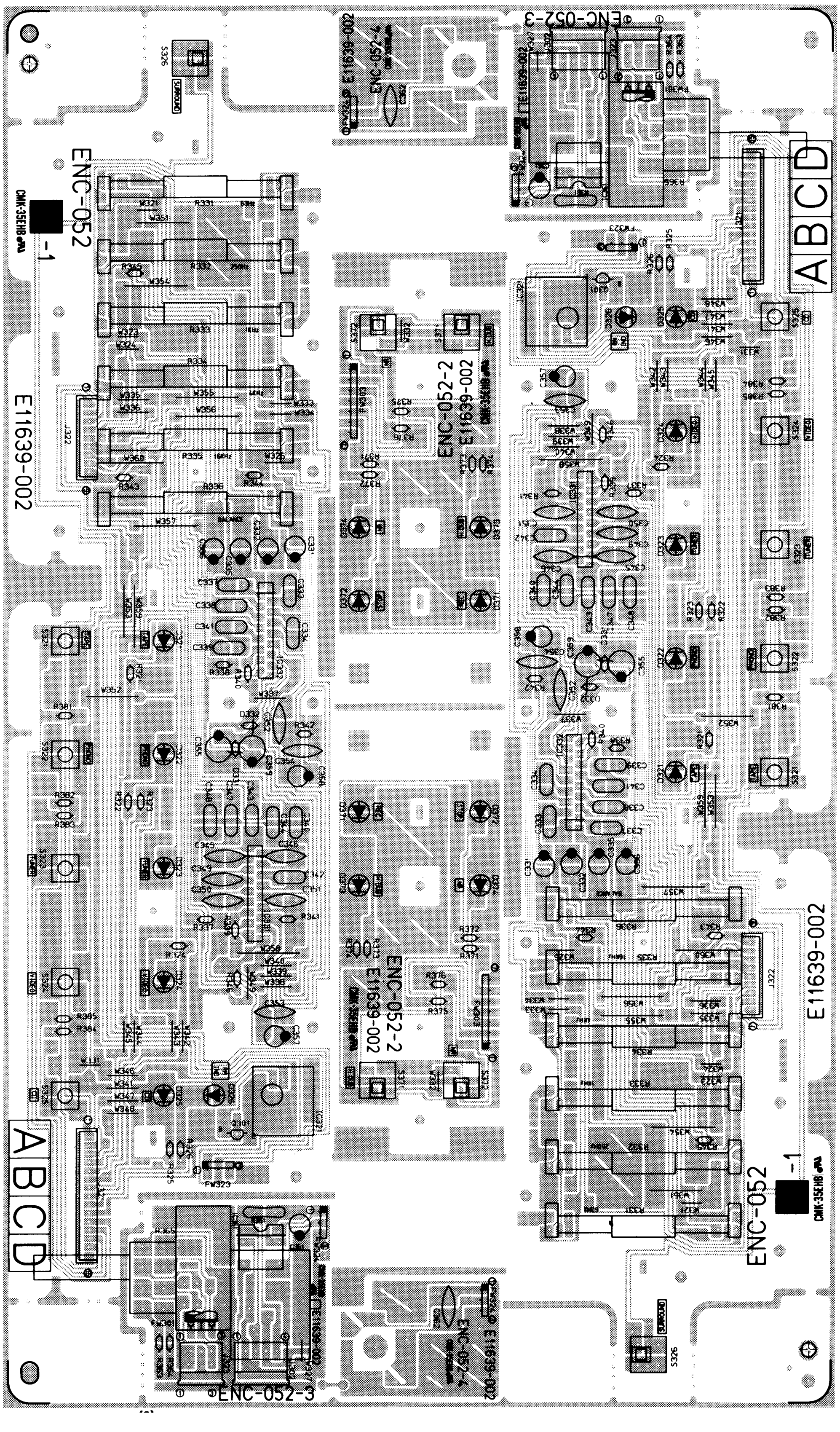
⚠ : SAFETY PARTS

OTHERS

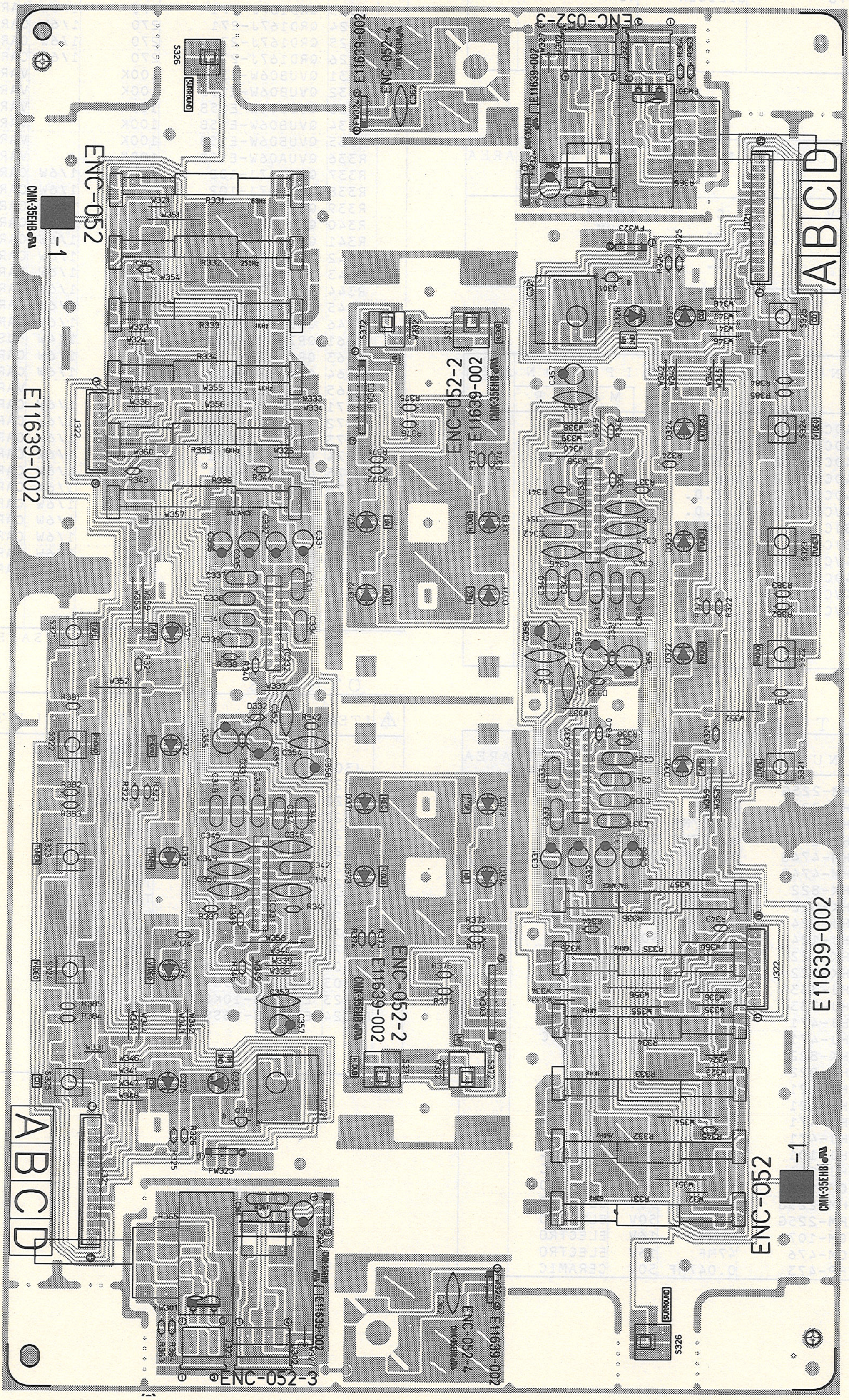
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-001	FUSE CLIP	
		EMG7331-001	FUSE CLIP	
		EWT011-088	TERMINAL WIRE	B
		EWT011-091	TERMINAL WIRE	F
		EX0008008N60S	SPACER	
		E11640-003	CIRCUIT BOARD	B
		E11640-003	CIRCUIT BOARD	C
		E11640-003	CIRCUIT BOARD	E
		E11640-003	CIRCUIT BOARD	F
		E11640-003BS	CIRCUIT BOARD	DBS
		E61380-032	CIRCUIT BOARD	B
		E65508-002	TAB	
		E67132-T2R0	FUSE LABEL	C
		E70945-H35	HEAT SINK	
		E70945-H35	HEAT SINK	
⚠		QMC0440-001	AC OUTLET	B
		SBSB3010Z	SCREW	
		SBSB3010Z	SCREW	
	J301	EMV7112-003	CONNECTOR	
	J303	EMV7112-007	CONNECTOR	
	J401	EMB90YV-401A	SPEAKER TERMINAL	
	J402	EMN00TV-204A	2P PIN JACK	
	J403	QMA1221-009	DC JACK	
	J404	QMS6312-023	HEADPHONE JACK	
	J551	EMN00TV-405A	4P PIN JACK	
	J552	EMN00TV-402A	4P PIN JACK	
	L401	ENZ8101-004	INDUCTOR	F
	L601	EQF0401-002	BAND CUT FILTER	
	L602	EQF0401-002	BAND CUT FILTER	
	L651	ENZ6003-004	BIAS OSC	
	L653	EQL2106-223	INDUCTOR	
	L654	EQL2106-223	INDUCTOR	
	P321	EMV5122-015R	PLUG ASSY	
	P322	EMV5122-009R	PLUG ASSY	
	P501	EMV5103-002A	PLUG ASSY	
	P601	QMV5005-009K	PLUG ASSY	
	P602	QMV5005-004K	PLUG ASSY	
	P604	QMV5005-004K	PLUG ASSY	
	P605	QMV5005-008K	PLUG ASSY	
	P606	QMV5005-003K	PLUG ASSY	
⚠	S001	QSP1106-004	POWER SWITCH	B
⚠	S001	QSP1106-004	POWER SWITCH	C
⚠	S001	QSP1106-004	POWER SWITCH	E
⚠	S001	QSP1106-004	POWER SWITCH	F
⚠	S001	QSP1106-004BS	POWER SWITCH	DBS
	S651	QSS6A12-E01	SLIDE SWITCH	
	EP001	E70859-001	EARTH PLATE	
	FW302	EWR34B-13KST	FLAT WIRE	
	FW551	EWR38B-30KST	FLAT WIRE	
	RT001	E67764-202	WRAPPING TERMINAL	B
	RT002	E67764-203	WRAPPING TERMINAL	C
	RT002	E67764-203	WRAPPING TERMINAL	DBS
	RT002	E67764-203	WRAPPING TERMINAL	E
	RT002	E67764-203	WRAPPING TERMINAL	F
	RT003	E67764-202	WRAPPING TERMINAL	C
	RT003	E67764-202	WRAPPING TERMINAL	DBS
	RT003	E67764-202	WRAPPING TERMINAL	E
	RT003	E67764-202	WRAPPING TERMINAL	F
	RT401	E67764-005	WRAPPING TERMINAL	
	RY401	ESK7D24-211	RELAY	
	XT501	ECX0004-194KM	RESONATOR	

⚠ : SAFETY PARTS

■ ENC-052 A SEA & Switch P.C. Board Ass'y


ENC-052 -1
CMK-35EHB
E11639-002
ENC-052-2
E11639-002
ENC-052-3
ENC-052-4
E11639-002
A
B
C
D

■ ENC-052 A SEA & Switch P.C. Board Ass'y


ENC-052
-1
CMK-35EHB
E11639-002
ENC-052-2
ENC-052-3
ENC-052-4
A
B
C
D
S326
SURROUND
BALANCE
J322

TRANSISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q301	DTC114YS	SILICON	ROHM	

I. C. S

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC321	GP1U501V	I.C.	SHARP	
	IC331	BA3812L	I.C.	ROHM	
	IC332	BA3812L	I.C.	ROHM	
	IC361	LB1639	I.C.	SANYO	

DIODES

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D321	SLR-34DC50F124	L.E.D.		
	D322	SLR-34DC50F124	L.E.D.		
	D323	SLR-34DC50F124	L.E.D.		
	D324	SLR-34DC50F124	L.E.D.		
	D325	SLR-34DC50F124	L.E.D.		
	D326	SLR-54VC50F165	L.E.D.	ROHM	
	D331	MTZ6.8JC	ZENER	ROHM	
	D332	MTZ6.8JC	ZENER	ROHM	
	D371	SLR-54VC50F165	L.E.D.	ROHM	
	D372	SLR-54DC50F165	L.E.D.	ROHM	
	D373	SLR-54VC50F165	L.E.D.	ROHM	
	D374	SLR-54VC50F165	L.E.D.	ROHM	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C331	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C332	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C333	QFV81HJ-273	0.027MF	50V	T.FILM	
	C334	QFV81HJ-273	0.027MF	50V	T.FILM	
	C335	QEK61HM-474G	0.47MF	50V	ELECTRO	
	C336	QEK61HM-474G	0.47MF	50V	ELECTRO	
	C337	QFN81HK-822	8200PF	50V	MYLAR	
	C338	QFN81HK-822	8200PF	50V	MYLAR	
	C339	QFV81HJ-124	0.12MF	50V	T.FILM	
	C340	QFV81HJ-124	0.12MF	50V	T.FILM	
	C341	QCY21HK-222	2200PF	50V	CERAMIC	
	C342	QCY21HK-222	2200PF	50V	CERAMIC	
	C343	QFV81HJ-333	0.033MF	50V	T.FILM	
	C344	QFV81HJ-333	0.033MF	50V	T.FILM	
	C345	QCS21HJ-471	470PF	50V	CERAMIC	
	C346	QCS21HJ-471	470PF	50V	CERAMIC	
	C347	QFN81HK-822	8200PF	50V	MYLAR	
	C348	QFN81HK-822	8200PF	50V	MYLAR	
	C349	QCS21HJ-121	120PF	50V	CERAMIC	
	C350	QCS21HJ-121	120PF	50V	CERAMIC	
	C351	QCS21HJ-471	470PF	50V	CERAMIC	
	C352	QCS21HJ-471	470PF	50V	CERAMIC	
	C353	QCS21HJ-101	100PF	50V	CERAMIC	
	C354	QCS21HJ-101	100PF	50V	CERAMIC	
	C355	QEK61CM-107	100MF	16V	ELECTRO	
	C357	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C358	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C359	QEK61CM-107	100MF	16V	ELECTRO	
	C361	QETB1CM-476	47MF	16V	ELECTRO	
	C362	QCF21HP-473	0.047MF	50V	CERAMIC	

RESISTORS

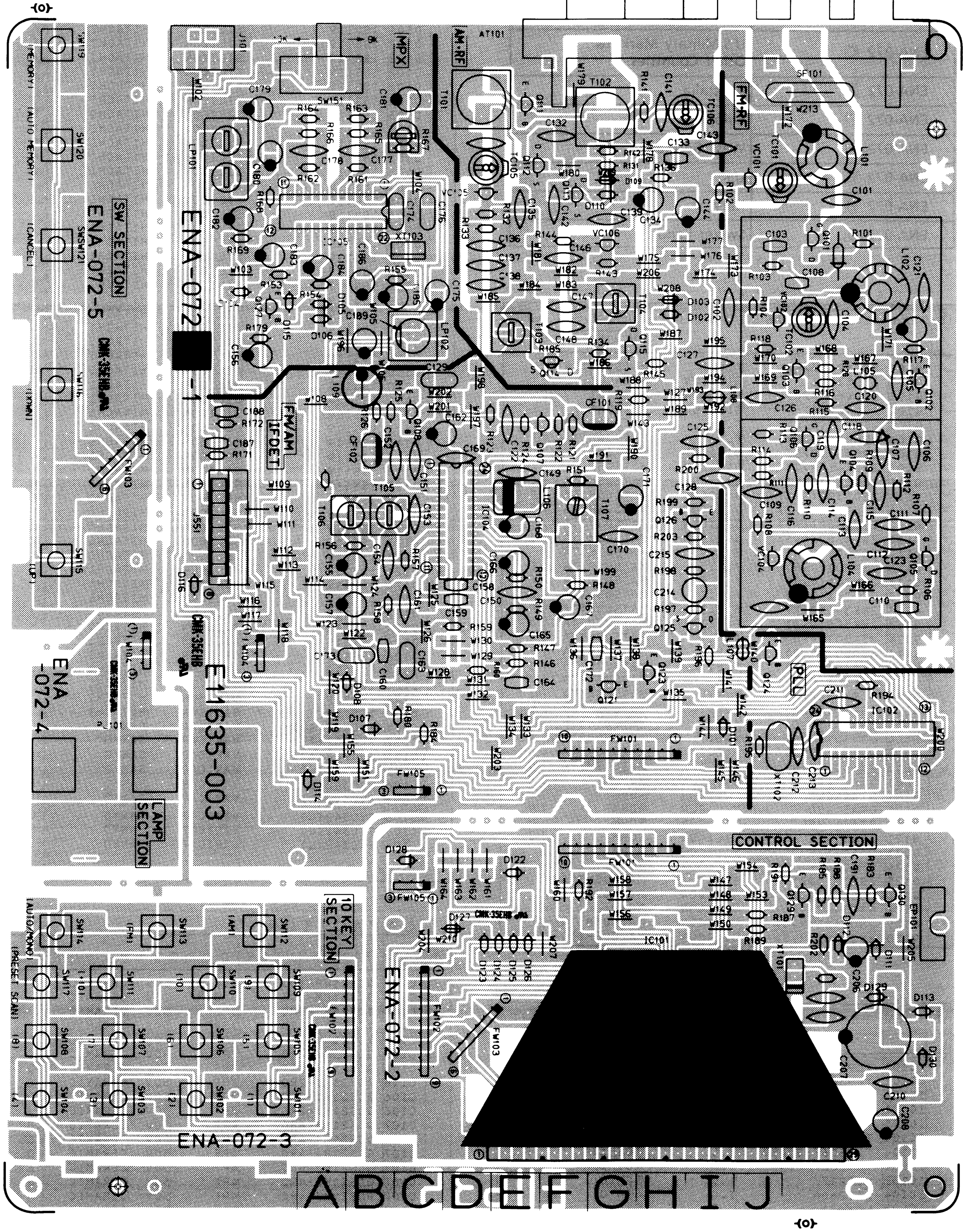
⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R321	QRD167J-271	270	1/6W	CARBON	
	R322	QRD167J-271	270	1/6W	CARBON	
	R323	QRD167J-271	270	1/6W	CARBON	
	R324	QRD167J-271	270	1/6W	CARBON	
	R325	QRD167J-271	270	1/6W	CARBON	
	R326	QRD167J-271	270	1/6W	CARBON	
	R331	QVUB06W-E15B	100K		VARIABLE	
	R332	QVUB06W-E15B	100K		VARIABLE	
	R333	QVUB06W-E15B	100K		VARIABLE	
	R334	QVUB06W-E15B	100K		VARIABLE	
	R335	QVUB06W-E15B	100K		VARIABLE	
	R336	QVUA06W-E15B	100K		VARIABLE	
	R337	QRD167J-102	1K	1/6W	CARBON	
	R338	QRD167J-102	1K	1/6W	CARBON	
	R339	QRD167J-392	3.9K	1/6W	CARBON	
	R340	QRD167J-392	3.9K	1/6W	CARBON	
	R341	QRD167J-392	3.9K	1/6W	CARBON	
	R342	QRD167J-392	3.9K	1/6W	CARBON	
	R343	QRD167J-332	3.3K	1/6W	CARBON	
	R344	QRD167J-332	3.3K	1/6W	CARBON	
	R345	QRD167J-221	220	1/6W	CARBON	
	R346	QRD167J-221	220	1/6W	CARBON	
⚠	R361	QRZ0077-100	10	1/4W	FUSIBLE	
	R363	QRD167J-153	15K	1/6W	CARBON	
	R364	QRD167J-153	15K	1/6W	CARBON	
	R365	QVDB91B-E15C	100K		VARIABLE	
	R371	QRD167J-271	270	1/6W	CARBON	
	R372	QRD167J-271	270	1/6W	CARBON	
	R373	QRD167J-472	4.7K	1/6W	CARBON	
	R374	QRD167J-271	270	1/6W	CARBON	
	R375	QRD167J-271	270	1/6W	CARBON	
	R376	QRD167J-152	1.5K	1/6W	CARBON	
	R381	QRD167J-473	47K	1/6W	CARBON	
	R382	QRD167J-473	47K	1/6W	CARBON	
	R383	QRD167J-473	47K	1/6W	CARBON	
	R384	QRD167J-473	47K	1/6W	CARBON	
	R385	QRD167J-473	47K	1/6W	CARBON	

⚠ : SAFETY PARTS

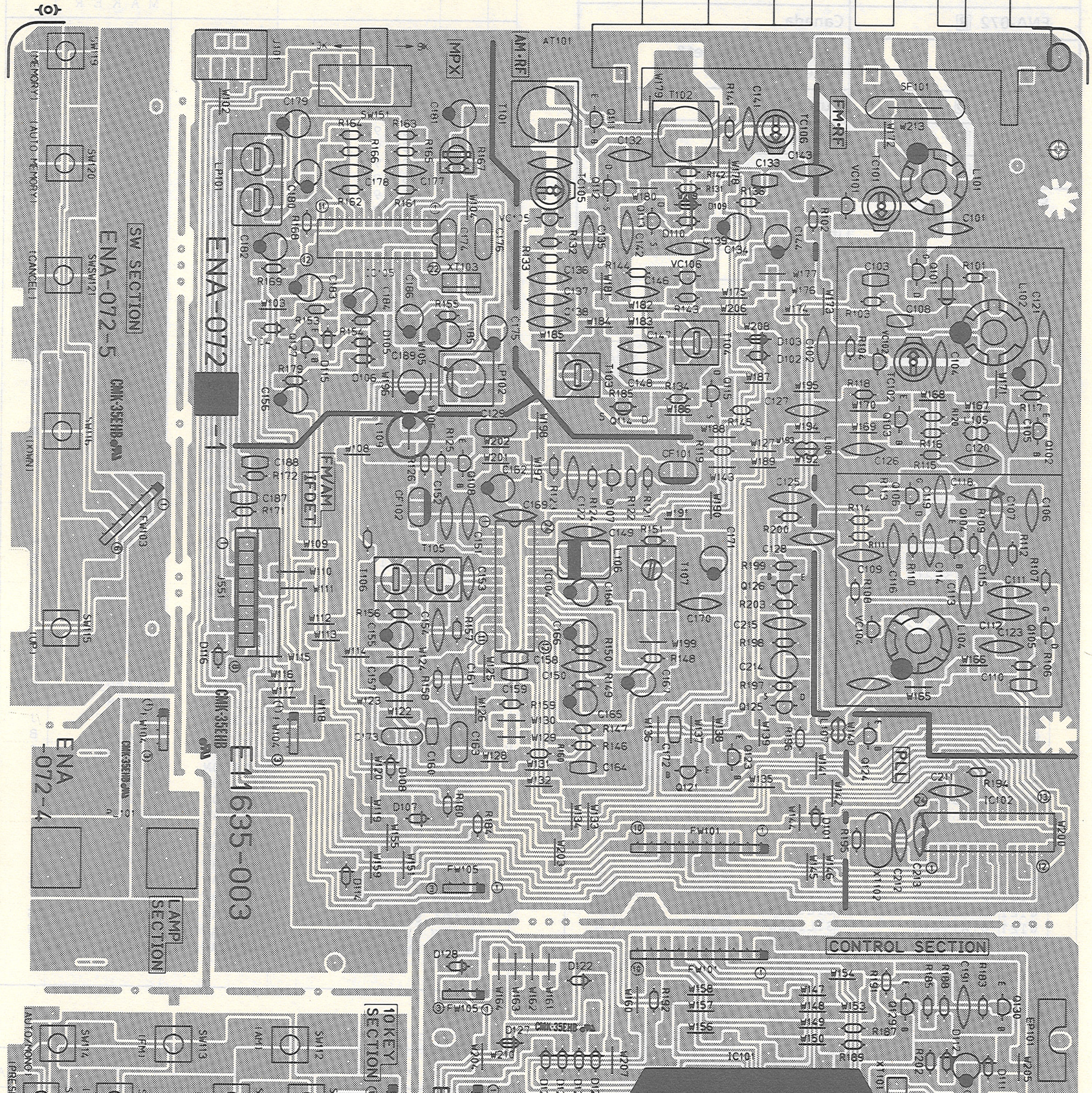
OTHERS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11639-002	CIRCUIT BOARD	
	J302	EMV7112-004R	CONNECTOR	
	J321	EMV7124-015	CONNECTOR	
	J322	EMV7124-009	CONNECTOR	
	J323	EMV7112-003R	CONNECTOR	
	S321	ESP0001-007	TACT SWITCH	
	S322	ESP0001-007	TACT SWITCH	
	S323	ESP0001-007	TACT SWITCH	
	S324	ESP0001-007	TACT SWITCH	
	S325	ESP0001-007	TACT SWITCH	
	S326	QSP2256-001	PUSH SWITCH	
	S371	QSP2256-001	PUSH SWITCH	
	S372	QSP2256-001	PUSH SWITCH	
	FW301	EWR23C-30JN	FLAT WIRE	
	FW303	EWR37B-25KST	FLAT WIRE	
	FW323	EWR33B-10KST	FLAT WIRE	
	FW324	EWR33B-16SST	FLAT WIRE	

■ ENA-072 ☐ Tuner P.C. Board Ass'y


SW SECTION
ENA-072-5
ENA-072
-1
E11635-003
AM-RF
FM-RF
MPX
FM/AM IF DET
PLL
LAMP SECTION
ENA-072-4
10 KEY SECTION
ENA-072-3
ENA-072-2
CONTROL SECTION
IC101
IC102
A
B
C
D
E
F
G
H
I
J

■ ENA-072 ☐ Tuner P.C. Board Ass'y


AM-RF
FM-RF
MPX
SW SECTION
ENA-072-5
ENA-072-1
E11635-003
FM/AM IFDET
PLL
LAMP SECTION
ENA-072-4
10 KEY SECTION
ENA-072-3
ENA-072-2
CONTROL SECTION
IC101
IC102
T101
T102
T103
T104
T105
T106
T107
SF101
CF101
CF102
FW101
FW102
FW103
FW105
J551
MEMORY
AUTO MEMORY
CANCEL
TUNING
LAMP
AUTO/MONO
FM
AM
PRESET SCAN
A B C D E F G H I J

Note (1)

PC Board Ass'y	Designated Areas
ENA-072 🄱	Canada
ENA-072 🄲	U.S.Military Market& Other Countries
ENA-072 🄳	Australia
ENA-072 🄴	Eulope
ENA-072 🄵	West Germany
ENA-072 🄶	U.K.
ENA-072 🄷	Itary
ENA-072 🄹	Swizer Land

TRANSISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	
	Q102	2SC535(C)	SILICON	HITACHI	
	Q103	2SC461(B,C)	SILICON	HITACHI	
	Q104	2SC461(C)	SILICON	HITACHI	
	Q105	2SK606(Q,R)	F.E.T	MATSUSHITA	
	Q106	2SK606(Q,R)	F.E.T	MATSUSHITA	F
	Q107	2SC535(B,C)	SILICON	HITACHI	
	Q108	2SC461(B,C)	SILICON	HITACHI	
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	E
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	F
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	G
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	H
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	J
	Q112	2SK301(Q,R)	F.E.T	MATSUSHITA	
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	E
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	F
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	G
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	H
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	J
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	E
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	F
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	G
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	H
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	J
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	E
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	F
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	G
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	H
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	J
	Q121	DTA114YS	SILICON	ROHM	E
	Q121	DTA114YS	SILICON	ROHM	F
	Q121	DTA114YS	SILICON	ROHM	G
	Q121	DTA114YS	SILICON	ROHM	H
	Q121	DTA114YS	SILICON	ROHM	J
	Q123	DTA114YS	SILICON	ROHM	
	Q124	DTA114YS	SILICON	ROHM	
	Q125	2SK301(Q2)	F.E.T	MATSUSHITA	
	Q126	2SC458(D)	SILICON	HITACHI	
	Q127	DTC144ES	SILICON	ROHM	
	Q129	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q130	2SC1685(R,S)	SILICON	MATSUSHITA	

I. C. S

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC101	TC9306F-028BS	I.C.	TOSHIBA	D
	IC101	TC9306F-028BS	I.C.	TOSHIBA	E
	IC101	TC9306F-028BS	I.C.	TOSHIBA	F
	IC101	TC9306F-028BS	I.C.	TOSHIBA	G
	IC101	TC9306F-028BS	I.C.	TOSHIBA	H
	IC101	TC9306F-028BS	I.C.	TOSHIBA	J
	IC101	TC9306F-034BS	I.C.	TOSHIBA	B
	IC101	TC9306F-034BS	I.C.	TOSHIBA	C
	IC102	LC7217	I.C.	SANYO	
	IC104	LA1266A	I.C.	SANYO	
	IC105	LA3401	I.C.	SANYO	

DIODES

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D101	1SS119	SILICON	HITACHI	
	D102	1SS119	SILICON	HITACHI	E
	D102	1SS119	SILICON	HITACHI	F
	D102	1SS119	SILICON	HITACHI	G
	D102	1SS119	SILICON	HITACHI	H
	D102	1SS119	SILICON	HITACHI	J
	D103	1SS119	SILICON	HITACHI	E
	D103	1SS119	SILICON	HITACHI	F
	D103	1SS119	SILICON	HITACHI	G
	D103	1SS119	SILICON	HITACHI	H
	D103	1SS119	SILICON	HITACHI	J
	D104	1SS119	SILICON	HITACHI	
	D105	1SS119	SILICON	HITACHI	
	D106	1SS119	SILICON	HITACHI	
	D107	1SS119	SILICON	HITACHI	
	D108	1SS119	SILICON	HITACHI	
	D109	1SS119	SILICON	HITACHI	E
	D109	1SS119	SILICON	HITACHI	F
	D109	1SS119	SILICON	HITACHI	G
	D109	1SS119	SILICON	HITACHI	H
	D109	1SS119	SILICON	HITACHI	J
	D110	1SS119	SILICON	HITACHI	E
	D110	1SS119	SILICON	HITACHI	F
	D110	1SS119	SILICON	HITACHI	G
	D110	1SS119	SILICON	HITACHI	H
	D110	1SS119	SILICON	HITACHI	J
	D111	1SS119	SILICON	HITACHI	
	D112	1SS119	SILICON	HITACHI	
	D113	1SS119	SILICON	HITACHI	
	D114	1SS119	SILICON	HITACHI	
	D115	1SS119	SILICON	HITACHI	
	D116	1SS119	SILICON	HITACHI	
	D122	1SS119	SILICON	HITACHI	H
	D123	1SS119	SILICON	HITACHI	E
	D123	1SS119	SILICON	HITACHI	F
	D123	1SS119	SILICON	HITACHI	G
	D123	1SS119	SILICON	HITACHI	H
	D123	1SS119	SILICON	HITACHI	J
	D124	1SS119	SILICON	HITACHI	D
	D124	1SS119	SILICON	HITACHI	E
	D124	1SS119	SILICON	HITACHI	F
	D124	1SS119	SILICON	HITACHI	G
	D124	1SS119	SILICON	HITACHI	H
	D124	1SS119	SILICON	HITACHI	J
	D126	1SS119	SILICON	HITACHI	B
	D127	1SS119	SILICON	HITACHI	C
	D128	1SS119	SILICON	HITACHI	
	D129	1SS119	SILICON	HITACHI	
	D130	1SS119	SILICON	HITACHI	
	VC101	SVC202(AB)	VARICAP	SANYO	
	VC102	SVC202(AB)	VARICAP	SANYO	
	VC104	SVC202(AB)	VARICAP	SANYO	
	VC105	SVC342(L)	VARICAP	SANYO	
	VC106	SVC342(L)	VARICAP	SANYO	E
	VC106	SVC342(L)	VARICAP	SANYO	F
	VC106	SVC342(L)	VARICAP	SANYO	G
	VC106	SVC342(L)	VARICAP	SANYO	H
	VC106	SVC342(L)	VARICAP	SANYO	J

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C102	QCF21HP-103	0.01MF	50V	CERAMIC	
	C103	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C104	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C105	QCT30CH-3R3	33PF	50V	CERAMIC	
	C106	QCS21HJ-2R0	2PF	50V	CERAMIC	B
	C106	QCS21HJ-2R0	2PF	50V	CERAMIC	C
	C106	QCS21HJ-2R0	2PF	50V	CERAMIC	D
	C106	QCS21HJ-2R0	2PF	50V	CERAMIC	E
	C106	QCS21HJ-2R0	2PF	50V	CERAMIC	G
	C106	QCS21HJ-2R0	2PF	50V	CERAMIC	J
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	B
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	C
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	D
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	E
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	G
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	H
	C107	QCS21HJ-4R0	4PF	50V	CERAMIC	J
	C108	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C109	QCF21HP-103	0.01MF	50V	CERAMIC	
	C110	QCVB1CM-103	0.01MF	16V	CERAMIC	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C111	QCT26CH-2R0	2PF	50V	CERAMIC	
	C112	QCT26TH-7R0	7PF	50V	CERAMIC	
	C113	QCT26CH-7R0	7PF	50V	CERAMIC	
	C114	QCT26CH-220	22PF	50V	CERAMIC	
	C115	QCT26CH-100	10PF	50V	CERAMIC	
	C116	QCF21HP-103	0.01MF	50V	CERAMIC	
	C118	QCS21HJ-3R0	3PF	50V	CERAMIC	F
	C119	QCT26CH-2R0	2PF	50V	CERAMIC	F
	C120	QCBB1HK-151	150PF	50V	CERAMIC	
	C121	QCF21HP-103	0.01MF	50V	CERAMIC	
	C122	QCF21HP-223	0.022MF	50V	CERAMIC	
	C123	QCF21HP-223	0.022MF	50V	CERAMIC	
	C125	QCF21HP-223	0.022MF	50V	CERAMIC	
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	B
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	C
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	D
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	E
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	G
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	J
	C126	QCS21HJ-101	100PF	50V	CERAMIC	F
	C126	QCS21HJ-101	100PF	50V	CERAMIC	H
	C127	QCS21HJ-330	33PF	50V	CERAMIC	
	C128	QCF21HP-223	0.022MF	50V	CERAMIC	B
	C128	QCF21HP-223	0.022MF	50V	CERAMIC	C
	C128	QCF21HP-223	0.022MF	50V	CERAMIC	D
	C128	QCF21HP-223	0.022MF	50V	CERAMIC	E
	C128	QCF21HP-223	0.022MF	50V	CERAMIC	G
	C128	QCF21HP-223	0.022MF	50V	CERAMIC	J
	C128	QCS21HJ-101	100PF	50V	CERAMIC	F
	C128	QCS21HJ-101	100PF	50V	CERAMIC	H
	C129	QCZ0205-155	1.5MF	25V	CERAMIC	F
	C129	QCZ0205-155	1.5MF	25V	CERAMIC	H
	C132	QCS21HJ-561	560PF	50V	CERAMIC	
	C133	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C134	QETB1EM-106	10MF	25V	ELECTRO	
	C135	QCC21EM-223	0.022MF	25V	CERAMIC	
	C136	QCT26CH-180	18PF	50V	CERAMIC	
	C137	QCT26CH-221	220PF	50V	CERAMIC	
	C138	QCT26CH-241	240PF	50V	CERAMIC	
	C139	QCC21EM-223	0.022MF	25V	CERAMIC	
	C141	QCS21HJ-270	27PF	50V	CERAMIC	E
	C141	QCS21HJ-270	27PF	50V	CERAMIC	F
	C141	QCS21HJ-270	27PF	50V	CERAMIC	G
	C141	QCS21HJ-270	27PF	50V	CERAMIC	H
	C141	QCS21HJ-270	27PF	50V	CERAMIC	J
	C142	QCY21HK-272	2700PF	50V	CERAMIC	E
	C142	QCY21HK-272	2700PF	50V	CERAMIC	F
	C142	QCY21HK-272	2700PF	50V	CERAMIC	G
	C142	QCY21HK-272	2700PF	50V	CERAMIC	H
	C142	QCY21HK-272	2700PF	50V	CERAMIC	J
	C143	QCF21HP-223	0.022MF	50V	CERAMIC	E
	C143	QCF21HP-223	0.022MF	50V	CERAMIC	F
	C143	QCF21HP-223	0.022MF	50V	CERAMIC	G
	C143	QCF21HP-223	0.022MF	50V	CERAMIC	H
	C143	QCF21HP-223	0.022MF	50V	CERAMIC	J
	C144	QETB1EM-106	10MF	25V	ELECTRO	E
	C144	QETB1EM-106	10MF	25V	ELECTRO	F
	C144	QETB1EM-106	10MF	25V	ELECTRO	G
	C144	QETB1EM-106	10MF	25V	ELECTRO	H
	C144	QETB1EM-106	10MF	25V	ELECTRO	J
	C146	QCT26CH-680	68PF	50V	CERAMIC	E
	C146	QCT26CH-680	68PF	50V	CERAMIC	F
	C146	QCT26CH-680	68PF	50V	CERAMIC	G
	C146	QCT26CH-680	68PF	50V	CERAMIC	H
	C146	QCT26CH-680	68PF	50V	CERAMIC	J
	C147	QCT26CH-220	22PF	50V	CERAMIC	E
	C147	QCT26CH-220	22PF	50V	CERAMIC	F
	C147	QCT26CH-220	22PF	50V	CERAMIC	G
	C147	QCT26CH-220	22PF	50V	CERAMIC	H
	C147	QCT26CH-220	22PF	50V	CERAMIC	J
	C148	QCT26CH-121	120PF	50V	CERAMIC	E
	C148	QCT26CH-121	120PF	50V	CERAMIC	F
	C148	QCT26CH-121	120PF	50V	CERAMIC	G
	C148	QCT26CH-121	120PF	50V	CERAMIC	H
	C148	QCT26CH-121	120PF	50V	CERAMIC	J
	C149	QCF21HP-223	0.022MF	50V	CERAMIC	
	C150	QCF21HP-223	0.022MF	50V	CERAMIC	
	C151	QCF21HP-223	0.022MF	50V	CERAMIC	
	C152	QCF21HP-223	0.022MF	50V	CERAMIC	
	C153	QCF21HP-223	0.022MF	50V	CERAMIC	
	C154	QCF21HP-223	0.022MF	50V	CERAMIC	
	C155	QETB1EM-226	22MF	25V	ELECTRO	
	C156	QETB1HM-475	4.7MF	50V	ELECTRO	
	C157	QETB1HM-474	0.47MF	50V	ELECTRO	
	C158	QCBB1HK-101	100PF	50V	CERAMIC	
	C159	QCBB1HK-101	100PF	50V	CERAMIC	
	C160	QCBB1HK-101	100PF	50V	CERAMIC	E
	C160	QCBB1HK-101	100PF	50V	CERAMIC	G
	C160	QCBB1HK-101	100PF	50V	CERAMIC	H
	C160	QCBB1HK-101	100PF	50V	CERAMIC	J

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C160	QCBB1HK-221	220PF	50V	CERAMIC	B
	C160	QCBB1HK-221	220PF	50V	CERAMIC	C
	C160	QCBB1HK-221	220PF	50V	CERAMIC	D
	C160	QCBB1HK-221	220PF	50V	CERAMIC	F
	C161	QCF21HP-223	0.022MF	50V	CERAMIC	
	C162	QETB1EM-106	10MF	25V	ELECTRO	
	C163	QFN81HJ-332	3300PF	50V	MYLAR	
	C164	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C165	QETB1HM-474	0.47MF	50V	ELECTRO	
	C166	QETB1HM-225	2.2MF	50V	ELECTRO	
	C167	QETB1HM-225	2.2MF	50V	ELECTRO	
	C168	QETB1HM-475	4.7MF	50V	ELECTRO	
	C169	QCF21HP-223	0.022MF	50V	CERAMIC	
	C170	QCF21HP-223	0.022MF	50V	CERAMIC	
	C171	QETB1EM-106	10MF	25V	ELECTRO	
	C172	QCF21HP-103	0.01MF	50V	CERAMIC	
	C173	QFN81HK-103	0.01MF	50V	MYLAR	D
	C173	QFN81HK-103	0.01MF	50V	MYLAR	E
	C173	QFN81HK-103	0.01MF	50V	MYLAR	F
	C173	QFN81HK-103	0.01MF	50V	MYLAR	G
	C173	QFN81HK-103	0.01MF	50V	MYLAR	H
	C173	QFN81HK-103	0.01MF	50V	MYLAR	J
	C173	QFN81HK-223	0.022MF	50V	MYLAR	B
	C173	QFN81HK-223	0.022MF	50V	MYLAR	C
	C174	QFN81HK-473	0.047MF	50V	MYLAR	
	C175	QETB1EM-106	10MF	25V	ELECTRO	
	C176	QCY21HK-102	1000PF	50V	CERAMIC	
	C177	QCS21HJ-271	270PF	50V	CERAMIC	D
	C177	QCS21HJ-271	270PF	50V	CERAMIC	E
	C177	QCS21HJ-271	270PF	50V	CERAMIC	F
	C177	QCS21HJ-271	270PF	50V	CERAMIC	G
	C177	QCS21HJ-271	270PF	50V	CERAMIC	H
	C177	QCS21HJ-271	270PF	50V	CERAMIC	J
	C177	QCS21HJ-561	560PF	50V	CERAMIC	B
	C177	QCS21HJ-561	560PF	50V	CERAMIC	C
	C178	QCS21HJ-271	270PF	50V	CERAMIC	D
	C178	QCS21HJ-271	270PF	50V	CERAMIC	E
	C178	QCS21HJ-271	270PF	50V	CERAMIC	F
	C178	QCS21HJ-271	270PF	50V	CERAMIC	G
	C178	QCS21HJ-271	270PF	50V	CERAMIC	H
	C178	QCS21HJ-271	270PF	50V	CERAMIC	J
	C178	QCS21HJ-561	560PF	50V	CERAMIC	B
	C178	QCS21HJ-561	560PF	50V	CERAMIC	C
	C179	QETB1HM-225	2.2MF	50V	ELECTRO	
	C180	QETB1HM-225	2.2MF	50V	ELECTRO	
	C181	QETB1EM-106	10MF	25V	ELECTRO	
	C182	QETB1HM-225	2.2MF	50V	ELECTRO	
	C183	QETB1HM-105	1MF	50V	ELECTRO	
	C184	QETB1HM-105	1MF	50V	ELECTRO	
	C185	QETB1HM-225	2.2MF	50V	ELECTRO	
	C186	QETB1HM-474	0.47MF	50V	ELECTRO	
	C187	QCS21HJ-331	330PF	50V	CERAMIC	F
	C188	QCS21HJ-331	330PF	50V	CERAMIC	F
	C189	QETB1EM-106	10MF	25V	ELECTRO	F
	C189	QETB1EM-106	10MF	25V	ELECTRO	H
	C191	QCY21HK-332	3300PF	50V	CERAMIC	
	C206	QETB1AM-476	47MF	10V	ELECTRO	
	C207	EEZ0503-479	47000MF		ELECTRO	
	C208	QETB1AM-476	47MF	10V	ELECTRO	
	C210	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C211	QCC21EM-473	0.047MF	25V	CERAMIC	
	C212	QCS21HJ-180	18PF	50V	CERAMIC	
	C213	QCS21HJ-180	18PF	50V	CERAMIC	
	C214	QEN51HM-474	0.47MF	50V	NON POLE	
	C215	QCY21HK-102	1000PF	50V	CERAMIC	
	TC101	ENZ1003-003			TRIMMER	
	TC102	ENZ1003-003			TRIMMER	
	TC105	ENZ1003-006			TRIMMER	
	TC106	ENZ1003-006			TRIMMER	E
	TC106	ENZ1003-006			TRIMMER	F
	TC106	ENZ1003-006			TRIMMER	G
	TC106	ENZ1003-006			TRIMMER	H
	TC106	ENZ1003-006			TRIMMER	J

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R101	QRD167J-330	33	1/6W	CARBON	
	R102	QRD167J-473	47K	1/6W	CARBON	
	R103	QRD167J-221	220	1/6W	CARBON	
	R104	QRD167J-473	47K	1/6W	CARBON	
	R106	QRD167J-331	330	1/6W	CARBON	
	R107	QRD167J-224	220K	1/6W	CARBON	
	R108	QRD167J-472	4.7K	1/6W	CARBON	
	R109	QRD167J-682	6.8K	1/6W	CARBON	
	R110	QRD167J-103	10K	1/6W	CARBON	B
	R110	QRD167J-103	10K	1/6W	CARBON	C
	R110	QRD167J-103	10K	1/6W	CARBON	D
	R110	QRD167J-103	10K	1/6W	CARBON	E
	R110	QRD167J-103	10K	1/6W	CARBON	G
	R110	QRD167J-103	10K	1/6W	CARBON	J
	R110	QRD167J-682	6.8K	1/6W	CARBON	F
	R110	QRD167J-682	6.8K	1/6W	CARBON	H
	R111	QRD167J-561	560	1/6W	CARBON	
	R112	QRD167J-222	2.2K	1/6W	CARBON	
	R113	QRD167J-224	220K	1/6W	CARBON	F
	R114	QRD167J-331	330	1/6W	CARBON	F
	R115	QRD167J-332	3.3K	1/6W	CARBON	
	R116	QRD167J-223	22K	1/6W	CARBON	
	R117	QRD167J-102	1K	1/6W	CARBON	
	R118	QRD167J-332	3.3K	1/6W	CARBON	
	R119	QRD167J-221	220	1/6W	CARBON	
	R120	QRD167J-102	1K	1/6W	CARBON	
	R121	QRD167J-391	390	1/6W	CARBON	
	R122	QRD167J-272	2.7K	1/6W	CARBON	
	R123	QRD167J-102	1K	1/6W	CARBON	
	R124	QRD167J-681	680	1/6W	CARBON	
	R125	QRD167J-332	3.3K	1/6W	CARBON	
	R126	QRD167J-221	220	1/6W	CARBON	
	R131	QRD167J-331	330	1/6W	CARBON	
	R132	QRD167J-103	10K	1/6W	CARBON	
	R133	QRD167J-473	47K	1/6W	CARBON	
	R134	QRD167J-103	10K	1/6W	CARBON	E
	R134	QRD167J-103	10K	1/6W	CARBON	F
	R134	QRD167J-103	10K	1/6W	CARBON	G
	R134	QRD167J-103	10K	1/6W	CARBON	H
	R134	QRD167J-103	10K	1/6W	CARBON	J
	R135	QRD167J-470	47	1/6W	CARBON	B
	R135	QRD167J-470	47	1/6W	CARBON	C
	R135	QRD167J-470	47	1/6W	CARBON	D
	R136	QRD167J-103	10K	1/6W	CARBON	
	R141	QRD167J-472	4.7K	1/6W	CARBON	E
	R141	QRD167J-472	4.7K	1/6W	CARBON	F
	R141	QRD167J-472	4.7K	1/6W	CARBON	G
	R141	QRD167J-472	4.7K	1/6W	CARBON	H
	R141	QRD167J-472	4.7K	1/6W	CARBON	J
	R142	QRD167J-331	330	1/6W	CARBON	E
	R142	QRD167J-331	330	1/6W	CARBON	F
	R142	QRD167J-331	330	1/6W	CARBON	G
	R142	QRD167J-331	330	1/6W	CARBON	H
	R142	QRD167J-331	330	1/6W	CARBON	J
	R143	QRD167J-103	10K	1/6W	CARBON	E
	R143	QRD167J-103	10K	1/6W	CARBON	F
	R143	QRD167J-103	10K	1/6W	CARBON	G
	R143	QRD167J-103	10K	1/6W	CARBON	H
	R143	QRD167J-103	10K	1/6W	CARBON	J
	R144	QRD167J-473	47K	1/6W	CARBON	E
	R144	QRD167J-473	47K	1/6W	CARBON	F
	R144	QRD167J-473	47K	1/6W	CARBON	G
	R144	QRD167J-473	47K	1/6W	CARBON	H
	R144	QRD167J-473	47K	1/6W	CARBON	J
	R145	QRD167J-103	10K	1/6W	CARBON	E
	R145	QRD167J-103	10K	1/6W	CARBON	F
	R145	QRD167J-103	10K	1/6W	CARBON	G
	R145	QRD167J-103	10K	1/6W	CARBON	H
	R145	QRD167J-103	10K	1/6W	CARBON	J
	R146	QRD167J-560	56	1/6W	CARBON	
	R147	QRD167J-103	10K	1/6W	CARBON	
	R148	QRD167J-103	10K	1/6W	CARBON	
	R149	QRD167J-223	22K	1/6W	CARBON	
	R150	QRD167J-273	27K	1/6W	CARBON	
	R151	QRD167J-224	220K	1/6W	CARBON	
	R153	QRD167J-103	10K	1/6W	CARBON	
	R154	QRD167J-103	10K	1/6W	CARBON	
	R155	QRD167J-562	5.6K	1/6W	CARBON	
	R156	QRD167J-822	8.2K	1/6W	CARBON	
	R157	QRD167J-102	1K	1/6W	CARBON	
	R158	QRD167J-183	18K	1/6W	CARBON	B
	R158	QRD167J-333	33K	1/6W	CARBON	C
	R158	QRD167J-333	33K	1/6W	CARBON	D
	R158	QRD167J-333	33K	1/6W	CARBON	E
	R158	QRD167J-333	33K	1/6W	CARBON	F

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R158	QRD167J-333	33K	1/6W	CARBON	G
	R158	QRD167J-333	33K	1/6W	CARBON	H
	R158	QRD167J-333	33K	1/6W	CARBON	J
	R159	QRD167J-561	560	1/6W	CARBON	
	R160	QRD167J-123	12K	1/6W	CARBON	B
	R160	QRD167J-123	12K	1/6W	CARBON	C
	R160	QRD167J-123	12K	1/6W	CARBON	D
	R160	QRD167J-123	12K	1/6W	CARBON	F
	R160	QRD167J-273	27K	1/6W	CARBON	E
	R160	QRD167J-273	27K	1/6W	CARBON	G
	R160	QRD167J-273	27K	1/6W	CARBON	H
	R160	QRD167J-273	27K	1/6W	CARBON	J
	R161	QRD167J-124	120K	1/6W	CARBON	B
	R161	QRD167J-124	120K	1/6W	CARBON	C
	R161	QRD167J-184	180K	1/6W	CARBON	D
	R161	QRD167J-184	180K	1/6W	CARBON	E
	R161	QRD167J-184	180K	1/6W	CARBON	F
	R161	QRD167J-184	180K	1/6W	CARBON	G
	R161	QRD167J-184	180K	1/6W	CARBON	H
	R161	QRD167J-184	180K	1/6W	CARBON	J
	R162	QRD167J-124	120K	1/6W	CARBON	B
	R162	QRD167J-124	120K	1/6W	CARBON	C
	R162	QRD167J-184	180K	1/6W	CARBON	D
	R162	QRD167J-184	180K	1/6W	CARBON	E
	R162	QRD167J-184	180K	1/6W	CARBON	F
	R162	QRD167J-184	180K	1/6W	CARBON	G
	R162	QRD167J-184	180K	1/6W	CARBON	H
	R162	QRD167J-184	180K	1/6W	CARBON	J
	R163	QRD167J-332	3.3K	1/6W	CARBON	
	R164	QRD167J-332	3.3K	1/6W	CARBON	
	R165	QRD167J-184	180K	1/6W	CARBON	B
	R165	QRD167J-184	180K	1/6W	CARBON	C
	R165	QRD167J-274	270K	1/6W	CARBON	D
	R165	QRD167J-274	270K	1/6W	CARBON	E
	R165	QRD167J-274	270K	1/6W	CARBON	F
	R165	QRD167J-274	270K	1/6W	CARBON	G
	R165	QRD167J-274	270K	1/6W	CARBON	H
	R165	QRD167J-274	270K	1/6W	CARBON	J
	R166	QRD167J-184	180K	1/6W	CARBON	B
	R166	QRD167J-184	180K	1/6W	CARBON	C
	R166	QRD167J-274	270K	1/6W	CARBON	D
	R166	QRD167J-274	270K	1/6W	CARBON	E
	R166	QRD167J-274	270K	1/6W	CARBON	F
	R166	QRD167J-274	270K	1/6W	CARBON	G
	R166	QRD167J-274	270K	1/6W	CARBON	H
	R166	QRD167J-274	270K	1/6W	CARBON	J
	R167	QRD167J-393	39K	1/6W	CARBON	B
	R167	QRD167J-393	39K	1/6W	CARBON	C
	R167	QVZ3518-104	100K	0.1W	VARIABLE	D
	R167	QVZ3518-104	100K	0.1W	VARIABLE	E
	R167	QVZ3518-104	100K	0.1W	VARIABLE	F
	R167	QVZ3518-104	100K	0.1W	VARIABLE	G
	R167	QVZ3518-104	100K	0.1W	VARIABLE	H
	R167	QVZ3518-104	100K	0.1W	VARIABLE	J
	R168	QRD167J-103	10K	1/6W	CARBON	
	R169	QRD167J-103	10K	1/6W	CARBON	
	R171	QRD167J-682	6.8K	1/6W	CARBON	
	R172	QRD167J-682	6.8K	1/6W	CARBON	
	R179	QRD167J-562	5.6K	1/6W	CARBON	
	R180	QRD167J-472	4.7K	1/6W	CARBON	
	R183	QRD167J-223	22K	1/6W	CARBON	
	R184	QRD167J-472	4.7K	1/6W	CARBON	
	R185	QRD167J-473	47K	1/6W	CARBON	
	R187	QRD167J-101	100	1/6W	CARBON	
	R188	QRD167J-103	10K	1/6W	CARBON	
	R189	QRD167J-103	10K	1/6W	CARBON	
	R191	QRD167J-332	3.3K	1/6W	CARBON	
	R192	QRD167J-103	10K	1/6W	CARBON	
	R194	QRD167J-472	4.7K	1/6W	CARBON	
	R195	QRD167J-473	47K	1/6W	CARBON	
	R196	QRD167J-103	10K	1/6W	CARBON	B
	R196	QRD167J-103	10K	1/6W	CARBON	C
	R196	QRD167J-103	10K	1/6W	CARBON	D
	R196	QRD167J-222	2.2K	1/6W	CARBON	E
	R196	QRD167J-222	2.2K	1/6W	CARBON	F
	R196	QRD167J-222	2.2K	1/6W	CARBON	G
	R196	QRD167J-222	2.2K	1/6W	CARBON	H
	R196	QRD167J-222	2.2K	1/6W	CARBON	J
	R197	QRD167J-222	2.2K	1/6W	CARBON	
	R198	QRD167J-332	3.3K	1/6W	CARBON	B
	R198	QRD167J-332	3.3K	1/6W	CARBON	C
	R198	QRD167J-332	3.3K	1/6W	CARBON	D
	R198	QRD167J-822	8.2K	1/6W	CARBON	E
	R198	QRD167J-822	8.2K	1/6W	CARBON	F
	R198	QRD167J-822	8.2K	1/6W	CARBON	G

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R198	QRD167J-822	8.2K	1/6W	CARBON	H
	R198	QRD167J-822	8.2K	1/6W	CARBON	J
	R199	QRD167J-472	4.7K	1/6W	CARBON	
	R200	QRD167J-222	2.2K	1/6W	CARBON	
	R202	QRD167J-472	4.7K	1/6W	CARBON	
	R203	QRD167J-181	180	1/6W	CARBON	

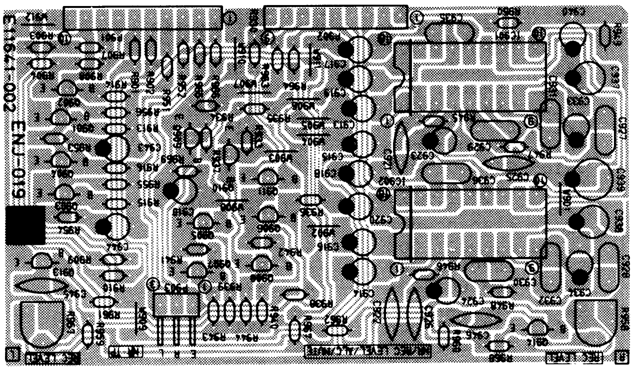
OTHERS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11635-003	CIRCUIT BOARD	
		E304180-001	SHIELD CASE	
		E74033-001	SHIELD PLATE	F
		E74033-001	SHIELD PLATE	H
		E74824-001	SHIELD CASE	F
		E74824-001	SHIELD CASE	H
	J551	EMV7112-008	CONNECTOR	
	L101	EQR2306-014	FM RF COIL	B
	L101	EQR2306-014	FM RF COIL	C
	L101	EQR2306-014	FM RF COIL	D
	L101	EQR2306-014	FM RF COIL	E
	L101	EQR2306-014	FM RF COIL	G
	L101	EQR2306-016	FM RF COIL	F
	L101	EQR2306-016	FM RF COIL	H
	L101	EQR2306-016	FM RF COIL	J
	L102	EQR2106-014	RF COIL	
	L104	EQR2406-004	FM OSC COIL	
	L105	EQL4004-1R5	INDUCTOR	
	L106	EQL3001-102K	INDUCTOR	
	L107	EQL4004-1R5	INDUCTOR	F
	L107	EQL4004-1R5	INDUCTOR	H
	L108	EQL4004-1R5	INDUCTOR	F
	L108	EQL4004-1R5	INDUCTOR	H
	L109	EQL2103-392	INDUCTOR	F
	L109	EQL2108-392	INDUCTOR	H
	T101	EQR1111-006	AM RF COIL	
	T102	EQR1111-005	AM RF COIL	E
	T102	EQR1111-005	AM RF COIL	F
	T102	EQR1111-005	AM RF COIL	G
	T102	EQR1111-005	AM RF COIL	H
	T102	EQR1111-005	AM RF COIL	J
	T103	EQR1207-015	MW OSC COIL	
	T104	EQR1307-009	LW OSC COIL	E
	T104	EQR1307-009	LW OSC COIL	F
	T104	EQR1307-009	LW OSC COIL	G
	T104	EQR1307-009	LW OSC COIL	H
	T104	EQR1307-009	LW OSC COIL	J
	T105	EQT2140-012	I.F. TRANSFORMER	
	T106	EQT2140-013	I.F. TRANSFORMER	
	T107	ECB1560-006	CERAMIC FILTER	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	F
	AT101	EMB41YV-301K	ANTENNA TERMINAL	H
	AT101	EMB41YV-301K	ANTENNA TERMINAL	J
	AT101	EMB41YV-401K	ANTENNA TERMINAL	B
	AT101	EMB41YV-401K	ANTENNA TERMINAL	C
	AT101	EMB41YV-401K	ANTENNA TERMINAL	D
	AT101	EMB41YV-401K	ANTENNA TERMINAL	E
	AT101	EMB41YV-401K	ANTENNA TERMINAL	G
	CF101	ECB2118-001R	CERAMIC FILTER	E
	CF101	ECB2118-001R	CERAMIC FILTER	F
	CF101	ECB2118-001R	CERAMIC FILTER	G
	CF101	ECB2118-001R	CERAMIC FILTER	H
	CF101	ECB2118-001R	CERAMIC FILTER	J
	CF101	ECB2123-001R	CERAMIC FILTER	B
	CF101	ECB2123-001R	CERAMIC FILTER	C
	CF101	ECB2123-001R	CERAMIC FILTER	D
	CF102	ECB2118-001R	CERAMIC FILTER	E
	CF102	ECB2118-001R	CERAMIC FILTER	F
	CF102	ECB2118-001R	CERAMIC FILTER	G
	CF102	ECB2118-001R	CERAMIC FILTER	H
	CF102	ECB2118-001R	CERAMIC FILTER	J
	CF102	ECB2123-001R	CERAMIC FILTER	B
	CF102	ECB2123-001R	CERAMIC FILTER	C
	CF102	ECB2123-001R	CERAMIC FILTER	D
	FC101	E45524-002	FUSE CLIP	
	FC102	E45524-002	FUSE CLIP	
	FW101	EWR3AB-15SST	FLAT WIRE	
	FW102	EWR39B-10SST	FLAT WIRE	
	FW103	EWR36B-25SST	FLAT WIRE	
	FW104	EWR33B-13SST	FLAT WIRE	

OTHERS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	FW105	EWR33B-15SST	FLAT WIRE	C
	J 101	QMS3533-001	MINI JACK	
	LC101	ELU0002-051	LCD PANEL	
	LP101	EQF0101-002	LOW PASS FILTER	
	LP102	EQF0102-001	LOW PASS FILTER	F
	SF101	EQF0201-006	BAND PASS FILTER	F
	SW101	ESP0001-007	TACT SWITCH	
	SW102	ESP0001-007	TACT SWITCH	
	SW103	ESP0001-007	TACT SWITCH	
	SW104	ESP0001-007	TACT SWITCH	
	SW105	ESP0001-007	TACT SWITCH	
	SW106	ESP0001-007	TACT SWITCH	
	SW107	ESP0001-007	TACT SWITCH	
	SW108	ESP0001-007	TACT SWITCH	
	SW109	ESP0001-007	TACT SWITCH	
	SW110	ESP0001-007	TACT SWITCH	
	SW111	ESP0001-007	TACT SWITCH	
	SW112	ESP0001-007	TACT SWITCH	
	SW113	ESP0001-007	TACT SWITCH	
	SW114	ESP0001-007	TACT SWITCH	
	SW115	ESP0001-007	TACT SWITCH	
	SW116	ESP0001-007	TACT SWITCH	
	SW117	ESP0001-007	TACT SWITCH	
	SW119	ESP0001-007	TACT SWITCH	
	SW120	ESP0001-007	TACT SWITCH	
	SW121	ESP0001-007	TACT SWITCH	
	SW151	QSS1201-039	SLIDE SWITCH	C
	XT101	ECX0072-000EM	RESONATOR	
	XT102	ECX0007-200KC	RESONATOR	
	XT103	ECX0000-456KR	RESONATOR	

■ ENJ-019 [A] Dolby P.C. Board Ass'y



TRANSISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q901	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q902	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q903	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q904	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q905	2SC1740(R,S)	SILICON	ROHM	
	Q906	2SC1740(R,S)	SILICON	ROHM	
	Q907	2SC1740(R,S)	SILICON	ROHM	
	Q908	2SC1740(R,S)	SILICON	ROHM	
	Q909	2SC1740(R,S)	SILICON	ROHM	
	Q910	2SC1740(R,S)	SILICON	ROHM	
	Q911	2SC1740(R,S)	SILICON	ROHM	
	Q913	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q914	2SD1302(S,T)	SILICON	MATSUSHITA	

I. C. S

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC901	AN7363N	I.C.	MATSUSHITA	
	IC902	AN7363N	I.C.	MATSUSHITA	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C910	QEK61CM-106G	10MF	16V	ELECTRO	
	C913	QEK61HM-105G	1MF	50V	ELECTRO	
	C914	QEK61HM-105G	1MF	50V	ELECTRO	
	C915	QEK61HM-105G	1MF	50V	ELECTRO	
	C916	QEK61HM-105G	1MF	50V	ELECTRO	
	C917	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C918	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C919	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C920	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C921	QCF21HP-103	0.01MF	50V	CERAMIC	
	C922	QCF21HP-103	0.01MF	50V	CERAMIC	
	C923	QEK61HM-105G	1MF	50V	ELECTRO	
	C924	QEK61HM-105G	1MF	50V	ELECTRO	
	C925	QCY21HK-122	1200PF	50V	CERAMIC	
	C926	QCY21HK-122	1200PF	50V	CERAMIC	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C927	QFV81HJ-104	0.1MF	50V	T.FILM	
	C928	QFV81HJ-104	0.1MF	50V	T.FILM	
	C929	QFN81HJ-272	2700PF	50V	MYLAR	
	C930	QFN81HJ-272	2700PF	50V	MYLAR	
	C931	QFV81HJ-683	0.068MF	50V	T.FILM	
	C932	QFV81HJ-683	0.068MF	50V	T.FILM	
	C933	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C934	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C935	QFN81HJ-182	1800PF	50V	MYLAR	
	C936	QFN81HJ-182	1800PF	50V	MYLAR	
	C937	QETB1AM-107	100MF	10V	ELECTRO	
	C938	QETB1AM-107	100MF	10V	ELECTRO	
	C939	QETB1CM-107	100MF	16V	ELECTRO	
	C940	QEK61CM-106G	10MF	16V	ELECTRO	
	C943	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C944	QEK61EM-475G	4.7MF	25V	ELECTRO	
	C945	QCY21HK-122	1200PF	50V	CERAMIC	
	C946	QCY21HK-122	1200PF	50V	CERAMIC	

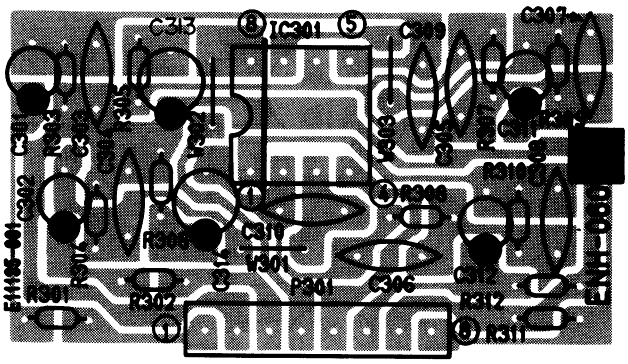
RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R901	QRD167J-562	5.6K	1/6W	CARBON	
	R902	QRD167J-562	5.6K	1/6W	CARBON	
	R903	QRD167J-103	10K	1/6W	CARBON	
	R904	QRD167J-103	10K	1/6W	CARBON	
	R907	QRD167J-562	5.6K	1/6W	CARBON	
	R908	QRD167J-562	5.6K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R910	QRD167J-103	10K	1/6W	CARBON	
	R913	QRD167J-223	22K	1/6W	CARBON	
	R914	QRD167J-223	22K	1/6W	CARBON	
	R915	QRD167J-223	22K	1/6W	CARBON	
	R916	QRD167J-223	22K	1/6W	CARBON	
	R930	QRD167J-473	47K	1/6W	CARBON	
	R933	QRD167J-182	1.8K	1/6W	CARBON	
	R934	QRD167J-182	1.8K	1/6W	CARBON	
	R935	QRD167J-153	15K	1/6W	CARBON	
	R936	QRD167J-153	15K	1/6W	CARBON	
	R937	QRD167J-473	47K	1/6W	CARBON	
	R938	QRD167J-473	47K	1/6W	CARBON	
	R939	QRD167J-392	3.9K	1/6W	CARBON	
	R940	QRD167J-392	3.9K	1/6W	CARBON	
	R941	QRD167J-223	22K	1/6W	CARBON	
	R942	QRD167J-223	22K	1/6W	CARBON	
	R943	QRD167J-561	560	1/6W	CARBON	
	R944	QRD167J-561	560	1/6W	CARBON	
	R945	QRD167J-102	1K	1/6W	CARBON	
	R946	QRD167J-102	1K	1/6W	CARBON	
	R947	QRD167J-680	68	1/6W	CARBON	
	R948	QRD167J-680	68	1/6W	CARBON	
	R949	QRD167J-103	10K	1/6W	CARBON	
	R950	QRD167J-472	4.7K	1/6W	CARBON	
	R951	QRD167J-102	1K	1/6W	CARBON	
	R952	QRD167J-102	1K	1/6W	CARBON	
	R953	QRD167J-102	1K	1/6W	CARBON	
	R954	QRD167J-102	1K	1/6W	CARBON	
	R955	QRD167J-473	47K	1/6W	CARBON	
	R956	QRD167J-473	47K	1/6W	CARBON	
	R957	QVZ3518-473	47K	0.1W	VARIABLE	
	R958	QVZ3518-473	47K	0.1W	VARIABLE	
	R959	QRD167J-683	68K	1/6W	CARBON	
	R960	QRD167J-683	68K	1/6W	CARBON	
	R961	QRD167J-473	47K	1/6W	CARBON	
	R962	QRD167J-473	47K	1/6W	CARBON	
	R963	QRD167J-223	22K	1/6W	CARBON	
	R964	QRD167J-223	22K	1/6W	CARBON	
	R965	QRD167J-103	10K	1/6W	CARBON	
	R966	QRD167J-103	10K	1/6W	CARBON	
	R967	QRD167J-103	10K	1/6W	CARBON	
	R968	QRD167J-103	10K	1/6W	CARBON	

OTHERS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11641-002	CIRCUIT BOARD	
	P901	EMV5101-010B	PLUG ASSY	
	P902	EMV5101-009B	PLUG ASSY	
	P903	EMV5101-003B	PLUG ASSY	

■ ENH-060 ☐ Phone Equalizer P.C. Board Ass'y


C313
⑧
IC301
⑤
C309
C307
C301
R303
C303
R305
C304
R304
C302
R301
R302
R306
R308
C310
W301
P301
C306
C312
R312
R311
R310
R307
C311
C308
C305
C314
①
④
⑥
E11135-001
ENH-060

Note (1)

PC Board Ass'y	Designated Areas
ENH-060 A	Canada,Australia, Eulope, Swizer Land,Itary,U.K. U.S.Military Market& Other Countries
ENH-060 B	West Germany

I. C. S

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	NJM4560DD	I.C.		

OTHERS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11135-001	CIRCUIT BOARD	
	P301	EMV5101-008B	PLUG ASSY	

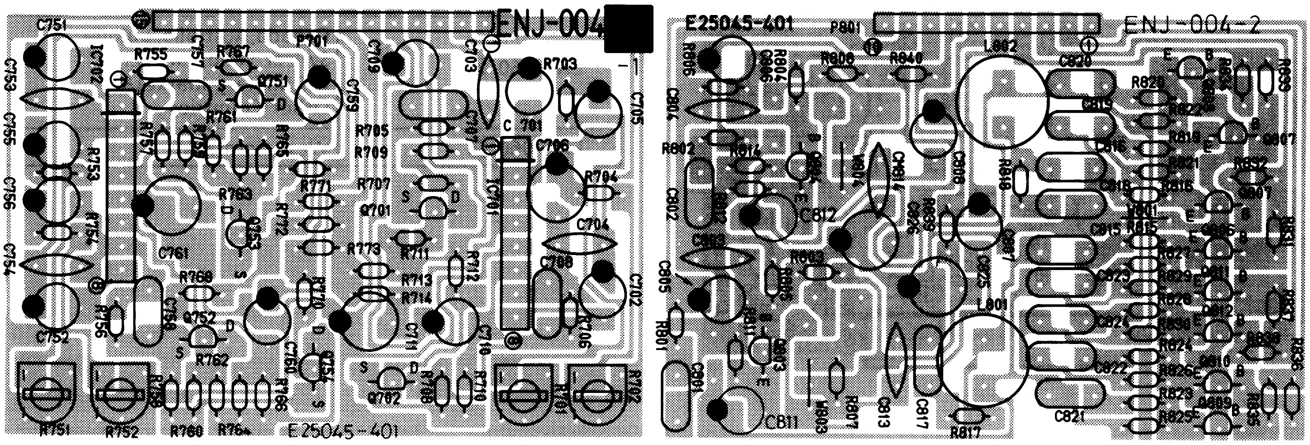
CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C301	QETB1HM-475	4.7MF	50V	ELECTRO	
	C302	QETB1HM-475	4.7MF	50V	ELECTRO	
	C303	QCY21HK-101	100PF	50V	CERAMIC	A
	C303	QCY21HK-471	470PF	50V	CERAMIC	B
	C304	QCY21HK-101	100PF	50V	CERAMIC	A
	C304	QCY21HK-471	470PF	50V	CERAMIC	B
	C305	QCY21HK-182	1800PF	50V	CERAMIC	
	C306	QCY21HK-182	1800PF	50V	CERAMIC	
	C307	QCY21HK-682	6800PF	50V	CERAMIC	
	C308	QCY21HK-682	6800PF	50V	CERAMIC	
	C309	QCY21HK-101	100PF	50V	CERAMIC	
	C310	QCY21HK-101	100PF	50V	CERAMIC	
	C311	QETB1HM-475	4.7MF	50V	ELECTRO	
	C312	QETB1HM-475	4.7MF	50V	ELECTRO	
	C313	QETB1AM-476	47MF	10V	ELECTRO	
	C314	QETB1AM-476	47MF	10V	ELECTRO	

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON	
	R302	QRD167J-222	2.2K	1/6W	CARBON	
	R303	QRD167J-473	47K	1/6W	CARBON	
	R304	QRD167J-473	47K	1/6W	CARBON	
	R305	QRD167J-751	750	1/6W	CARBON	
	R306	QRD167J-751	750	1/6W	CARBON	
	R307	QRD167J-393	39K	1/6W	CARBON	
	R308	QRD167J-393	39K	1/6W	CARBON	
	R309	QRD167J-474	470K	1/6W	CARBON	
	R310	QRD167J-474	470K	1/6W	CARBON	
	R311	QRD167J-104	100K	1/6W	CARBON	
	R312	QRD167J-104	100K	1/6W	CARBON	

■ ENJ-004 H Record Amplifier and Playback Amplifier P.C. Board Ass'y



TRANSISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q701	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q702	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q751	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q752	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q753	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q754	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q803	2SC1740LN(R,S)	SILICON	ROHM	
	Q804	2SC1740LN(R,S)	SILICON	ROHM	
	Q805	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q806	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q807	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q808	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q809	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q810	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q811	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q812	2SC1685(Q,R)	SILICON	MATSUSHITA	

I. C. S

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC701	M51522L	I.C.	MITSUBISHI	
	IC702	M51522L	I.C.	MITSUBISHI	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C701	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C702	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C703	QCS21HJ-101	100PF	50V	CERAMIC	
	C704	QCS21HJ-101	100PF	50V	CERAMIC	
	C705	QEK61CM-107	100MF	16V	ELECTRO	
	C706	QEK61CM-107	100MF	16V	ELECTRO	
	C707	QFN81HJ-822	8200PF	50V	MYLAR	
	C708	QFN81HJ-822	8200PF	50V	MYLAR	
	C709	QEK61HM-105G	1MF	50V	ELECTRO	
	C710	QEK61HM-105G	1MF	50V	ELECTRO	
	C711	QEK61CM-107	100MF	16V	ELECTRO	
	C751	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C752	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C753	QCS21HJ-101	100PF	50V	CERAMIC	
	C754	QCS21HJ-101	100PF	50V	CERAMIC	
	C755	QETB1AM-107	100MF	10V	ELECTRO	
	C756	QETB1AM-107	100MF	10V	ELECTRO	
	C757	QFN81HJ-822	8200PF	50V	MYLAR	
	C758	QFN81HJ-822	8200PF	50V	MYLAR	
	C759	QEK61HM-105G	1MF	50V	ELECTRO	
	C760	QEK61HM-105G	1MF	50V	ELECTRO	
	C761	QEK61CM-107	100MF	16V	ELECTRO	
	C801	QCF21HP-473	0.047MF	50V	CERAMIC	
	C802	QCF21HP-473	0.047MF	50V	CERAMIC	
	C803	QCS21HJ-151	150PF	50V	CERAMIC	

CAPACITORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C804	QCS21HJ-151	150PF	50V	CERAMIC	
	C805	QETB1HM-225	2.2MF	50V	ELECTRO	
	C806	QETB1HM-225	2.2MF	50V	ELECTRO	
	C807	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C808	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C811	QEK61CM-106G	10MF	16V	ELECTRO	
	C812	QEK61CM-106G	10MF	16V	ELECTRO	
	C813	QCS21HJ-271	270PF	50V	CERAMIC	
	C814	QCS21HJ-271	270PF	50V	CERAMIC	
	C815	QFN81HJ-682	6800PF	50V	MYLAR	
	C816	QFN81HJ-682	6800PF	50V	MYLAR	
	C817	QFN81HJ-392	3900PF	50V	MYLAR	
	C818	QFN81HJ-392	3900PF	50V	MYLAR	
	C819	QFN81HJ-123	0.012MF	50V	MYLAR	
	C820	QFN81HJ-123	0.012MF	50V	MYLAR	
	C821	QFN81HJ-682	6800PF	50V	MYLAR	
	C822	QFN81HJ-682	6800PF	50V	MYLAR	
	C823	QFN81HJ-153	0.015MF	50V	MYLAR	
	C824	QFN81HJ-153	0.015MF	50V	MYLAR	
	C825	QEK61CM-107	100MF	16V	ELECTRO	
	C826	QEK61CM-107	100MF	16V	ELECTRO	

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R701	QVZ3518-221	220	0.1W	VARIABLE	
	R702	QVZ3518-221	220	0.1W	VARIABLE	
	R703	QRD167J-101	100	1/6W	CARBON	
	R704	QRD167J-101	100	1/6W	CARBON	
	R705	QRD167J-334	330K	1/6W	CARBON	
	R706	QRD167J-334	330K	1/6W	CARBON	
	R707	QRD167J-622	6.2K	1/6W	CARBON	
	R708	QRD167J-622	6.2K	1/6W	CARBON	
	R709	QRD167J-912	9.1K	1/6W	CARBON	
	R710	QRD167J-912	9.1K	1/6W	CARBON	
	R711	QRD167J-105	1M	1/6W	CARBON	
	R712	QRD167J-105	1M	1/6W	CARBON	
	R713	QRD167J-472	4.7K	1/6W	CARBON	
	R714	QRD167J-471	470	1/6W	CARBON	
	R751	QVZ3518-221	220	0.1W	VARIABLE	
	R752	QVZ3518-221	220	0.1W	VARIABLE	
	R753	QRD167J-101	100	1/6W	CARBON	
	R754	QRD167J-101	100	1/6W	CARBON	
	R755	QRD167J-334	330K	1/6W	CARBON	
	R756	QRD167J-334	330K	1/6W	CARBON	
	R757	QRD167J-392	3.9K	1/6W	CARBON	
	R758	QRD167J-392	3.9K	1/6W	CARBON	
	R759	QRD167J-222	2.2K	1/6W	CARBON	
	R760	QRD167J-222	2.2K	1/6W	CARBON	
	R761	QRD167J-512	5.1K	1/6W	CARBON	
	R762	QRD167J-512	5.1K	1/6W	CARBON	
	R763	QRD167J-432	4.3K	1/6W	CARBON	
	R764	QRD167J-432	4.3K	1/6W	CARBON	
	R765	QRD167J-223	22K	1/6W	CARBON	
	R766	QRD167J-223	22K	1/6W	CARBON	

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R767	QRD167J-105	1M	1/6W	CARBON	
	R768	QRD167J-105	1M	1/6W	CARBON	
	R769	QRD167J-105	1M	1/6W	CARBON	
	R770	QRD167J-105	1M	1/6W	CARBON	
	R771	QRD167J-471	470	1/6W	CARBON	
	R772	QRD167J-472	4.7K	1/6W	CARBON	
	R773	QRD167J-472	4.7K	1/6W	CARBON	
	R801	QRD167J-333	33K	1/6W	CARBON	
	R802	QRD167J-333	33K	1/6W	CARBON	
	R803	QRD167J-394	390K	1/6W	CARBON	
	R804	QRD167J-394	390K	1/6W	CARBON	
	R805	QRD167J-683	68K	1/6W	CARBON	
	R806	QRD167J-683	68K	1/6W	CARBON	
	R807	QRD167J-153	15K	1/6W	CARBON	
	R808	QRD167J-153	15K	1/6W	CARBON	
	R811	QRD167J-242	2.4K	1/6W	CARBON	
	R812	QRD167J-242	2.4K	1/6W	CARBON	
	R815	QRD167J-331	330	1/6W	CARBON	
	R816	QRD167J-331	330	1/6W	CARBON	
	R817	QRD167J-330	33	1/6W	CARBON	
	R818	QRD167J-330	33	1/6W	CARBON	
	R819	QRD167J-222	2.2K	1/6W	CARBON	
	R820	QRD167J-222	2.2K	1/6W	CARBON	
	R821	QRD167J-392	3.9K	1/6W	CARBON	
	R822	QRD167J-392	3.9K	1/6W	CARBON	
	R823	QRD167J-221	220	1/6W	CARBON	
	R824	QRD167J-221	220	1/6W	CARBON	
	R825	QRD167J-104	100K	1/6W	CARBON	
	R826	QRD167J-104	100K	1/6W	CARBON	
	R827	QRD167J-221	220	1/6W	CARBON	

RESISTORS

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R828	QRD167J-221	220	1/6W	CARBON	
	R829	QRD167J-332	3.3K	1/6W	CARBON	
	R830	QRD167J-332	3.3K	1/6W	CARBON	
	R831	QRD167J-473	47K	1/6W	CARBON	
	R832	QRD167J-473	47K	1/6W	CARBON	
	R833	QRD167J-473	47K	1/6W	CARBON	
	R834	QRD167J-473	47K	1/6W	CARBON	
	R835	QRD167J-473	47K	1/6W	CARBON	
	R836	QRD167J-473	47K	1/6W	CARBON	
	R837	QRD167J-473	47K	1/6W	CARBON	
	R838	QRD167J-473	47K	1/6W	CARBON	
	R839	QRD167J-101	100	1/6W	CARBON	
	R840	QRD167J-101	100	1/6W	CARBON	

OTHERS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E25045-401	CIRCUIT BOARD	H
	L801	EQL2106-562	INDUCTOR	
	L802	EQL2106-562	INDUCTOR	
	P701	EMV5101-015B	PLUG ASSY	
	P801	EMV5101-010B	PLUG ASSY	

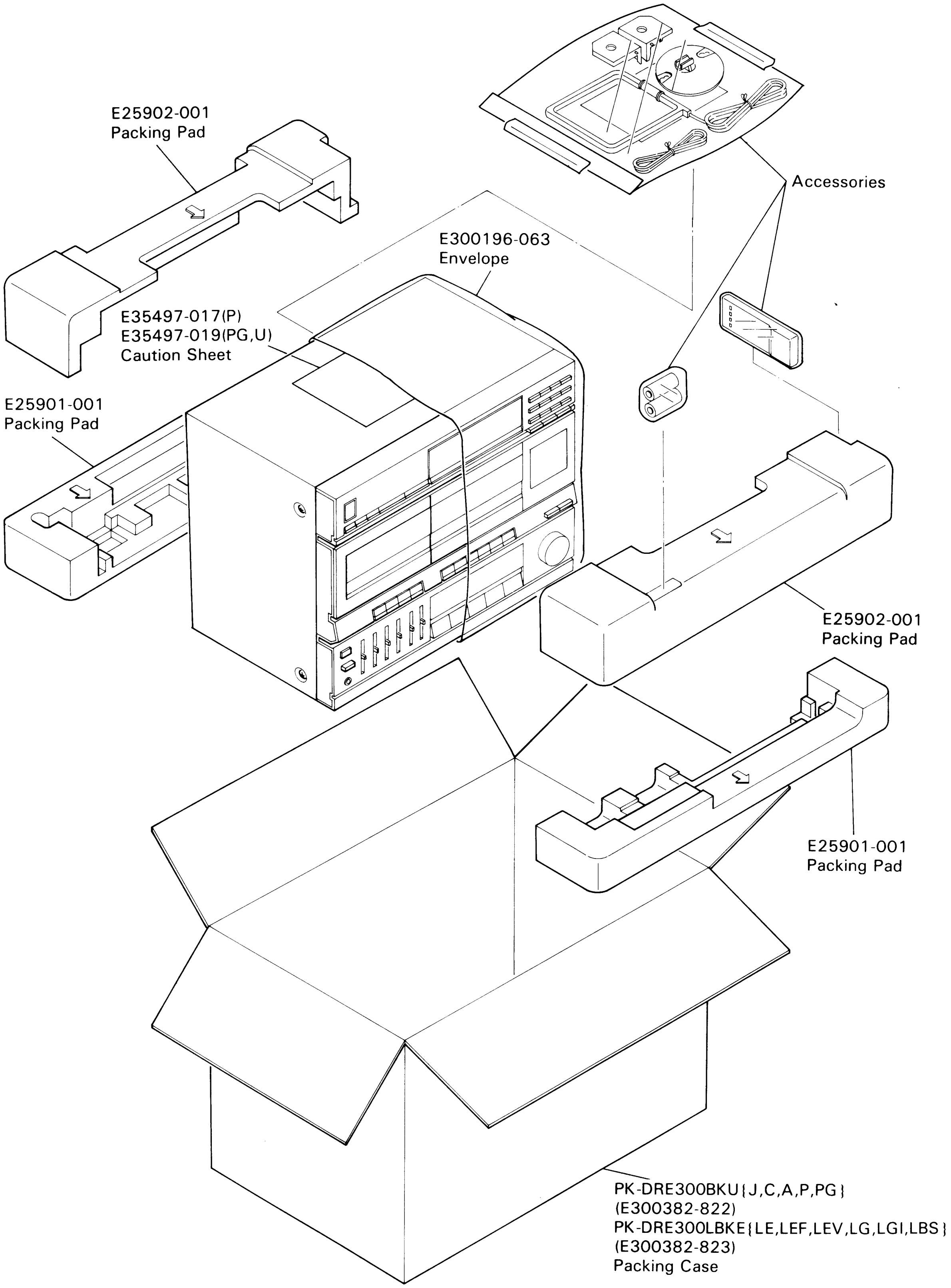
Accessories List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
		E30580-1453B	Instruction Book	1		Except for BS
		E30580-1453BBS	Instruction Book	1		LBS
		E43486-340A	Safety Sheet	1		LG
		BT20025K	Warranty Card	1		C
		BT20029C	Warranty Card	1	for Australia	A
		BT20048B	Warranty Card	1		P,PG
		BT20060	Warranty Card	1		LBS
		BT20064	Warranty Card	1		lG
		BT20098	Warranty Card	1	for New Zealand	A
		BT20046C	Service Infomation Card	1		P,PG
		BT20071A	Service Center List	1		C
		BT20066	EEC Agency	1		LG,LBS
		QZL1008-001	FTZ nfomation Sheet	1		LG
		E35497-017	Cation Sheet	1	10V	P,PG
		E35497-019	Cation Sheet	1	220V	U
		EQB4001-012	AM Loop Antenna	1		
		E304084-001	Loop Stand	1		
		TCP-3304	Audio Tape Pan	1		
		EWP502-001	Bilt-in Antenna	1		Except for LG
		RM-SE300	Remote Control Unit	1		
		UM-3(DJ)	Baterry	1		
		E04056	Siemens Plug	1		PG,U
⚠		EMZ2001-007	Adaptor	1		LEV
		E67007-001	Wire Antenna Ass'y	1		LG
		E303919-003	Stand	1	Left	
		E303919-004	Stand	1	Right	
		QPGA008-01905	Envelope	1	for Stand	
		SBSE3008N	Screw	2	for Stand	
		QPGA003-00503	Envelope	1	for Screw	
		E73539-002	Cation Sheet	1	for Stand	
		E41202-2	Envelope	1	for Instruction Book	Except for BS
		E41202-2BS	Envelope	1	for Instruction Book	BS

The Marks for Designated Areas
C··················Canada
A···················Australia
LE,LEF···········Europe
LEV···············Switzer Land
LG·················West Germany
LGI···············Itary
LES···············Spain
LBS···············U.K.
P,PG···········U.S.Military Market
U················Other Countries

No mark indicates all areas.

Packing Materials and Part Numbers


E25902-001
Packing Pad
Accessories
E300196-063
Envelope
E35497-017(P)
E35497-019(PG,U)
Caution Sheet
E25901-001
Packing Pad
E25902-001
Packing Pad
E25901-001
Packing Pad
PK-DRE300BKU{J,C,A,P,PG}
(E300382-822)
PK-DRE300LBKE{LE,LEF,LEV,LG,LGI,LBS}
(E300382-823)
Packing Case

The Marks for Designated Areas

C··················Canada
A··················Australia
LE,LEF··········Europe
LEV···············Switzer Land
LG·················West Germany
LGI···············Itary
LES···············Spain
LBS···············U.K.
P,PG···········U.S.Military Market
U··················Other Countries
No mark indicates all areas.